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CANADIAN ASSOCIATION OF UNIVERSITY TEACHERS  
ASSOCIATION CANADIENNE DES PROFESSEURS D'UNIVERSITÉ

# bulletin

## THE NEXT FOUR YEARS : The CAUT Lobbying Conference

With a new government in Ottawa the focus of attention for would be lobbyists is its plans for the next four years. This was the theme for the 1989 CAUT lobbying conference held in Ottawa. The conference opened with an address by the Minister of State (Science and Technology) the Honourable William Winegard in the main parliament building, the Centre Block. A former university president Dr. Winegard laid out some of the



ARTHUR MAY

difficulties which the government faced in the next four years. He emphasised the battle between balancing the budget and the various expenditure demands. He also pointed out that the government was intent on developing an effective policy for science in Canada.

The substantive theme of research ran through much of the conference not only in addresses of the speakers but also in a simulation that was run as a major part of the conference.

An initial briefing that the conference received was from Don Savage on some of the complexities of the government in Ottawa. One of the defences that the federal government deploys is the very complexity of government so that a lot of hard work is required just to find out who are the appropriate people to talk to. This complexity can slow events but it can also camouflage activity. The flow chart of policy development and legislation convinced everybody that understanding Ottawa was no simple task. A little bit of practical advice was to obtain a government phone book. This at least provides the codes for access to the decision makers.

Mme Paule Leduc, the President of SSHRCC, addressed the conference on the topic of the outlook for the humanities and social sciences. Pointing out that research policy is often short term she pointed the contrast with the long term vision that is provided by the humanities. She elaborated that one of the tasks ahead was to integrate research into the wider debate on research policy. There are many aspects of government policy that are changing the way research is done and there should be an investigation of the effects of this. One notable point was that the policies of government themselves have increased the rate of change in research. In her speech Mme Leduc pointed out that the council was collaborating with NSERC in joint master's level fellowships and that there maybe a joint programme in technological management. The financing of the Council was outlined and the point made that there had been a 17% increase in demands for funds while the pool of funds to be provided had stayed the same.

Since this was a message that we were to hear again, it bears emphasising. Mme Leduc concluded her contribution by pointing out that more money was needed for fundamental research. That too was a strain that has been often heard among academics.

An international comparison was provided by Jerry Morris who is the Director of Legislation for the American Federation of Teachers. The scale of that organization's efforts in lobbying is perhaps caught by the fact that it has a Director concerned essentially with tracking and effecting the legislative process in Washington. The topic of his address to the conference was on alliance building in Washington. He made a very convincing case that the scale of affairs in Washington is such that only by sharing skills and information is one able to have an effective voice. Reflecting on a fact of U.S. political life he commented that representatives and senators would rather be elected than be right. This provided the lobbyists with an opportunity to affect political action committees. These are a feature of Washington that do not have direct equivalents in Ottawa.

It had been essential for those engaged in higher education to form an alliance in order to fight some of the worst effects of the Reagan years. They had in some way been successful because some of the cuts to funding had been restored. They had also had a successful effort in the area of mandatory retirement. A considerable part of that success Dr. Morris attributed to a very large field operation. For example, representatives visiting their districts are often met by informed individuals, asking about legislation and urging the politician to vote a particular way. If the listeners had been persuaded earlier that Ottawa is a maze then they were convinced that Washington is a labyrinth. One of the effective ways to get around both is to build alliances.



PAT FILE

One of the active political fields at the moment is that concerned with the status of women. Pat File, a lawyer and lobbying consultant on these matters outlined what was to come in the next four years. Although there had been no new initiatives in this area since the government was elected in November, she

suggested that there will be two main thrusts: integration of work and family responsibilities and full employment equity for women. The former includes issues such as childcare, maternity and parental leaves; the latter will rely heavily on the federal contractors programme and the importance of pay equity and benefits for part-time workers.

She too spoke of the need for combined action in order to have an effect. There was a lot of work to be done in providing briefs and commentaries on legislation and policies. However, the most important effect that we could have would be to ensure that the universities instituted effective policies of employment equity. And that the universities themselves had policies on matters such as sexual harassment, which are important to women.

There was a panel on Native Post Secondary Education in Canada in which Mr. Harvey McCue, the Director of Education Policy and Planning Directorate, Indian and Northern Affairs and Mr. Russell Diabo, a representative of the Assembly of First Nations and a graduate student, spoke to the current issues. There was a noticeable contrast in the outlooks of the two speakers. Mr. McCue took the view that many good things had been accomplished, in particular the increased participation in post secondary education. Mr. Diabo, on the other hand, pointed out that many rights had not been respected in the provision of services to native Canadians. The capping of financial support by the government was obviously a matter of difference between the two speakers and a stimulus for questions from the floor since this is an active area of CAUT lobbying.

The final address speaker at the conference was Dr. Art May, the President of NSERC. He gave up his Sunday morning to

talk on the outlook for science and research. He pointed out that the luck of Canadians in having an abundance of natural resources was beginning to wane since there were now many other sources of the things that we could produce. And even where there was a demand for our products we still tended to export the low value items, fish rather than fish processing machinery. Arguing that 'Economic strength today is strength in ideas' he emphasised the need to carry out all sorts of research but especially fundamental work. Noting that the median age of researchers in government and university laboratories was now fifty, he emphasised the need for support for university research in order to renew the population of workers.

Dr. May too spoke of too little money being sought by too many competent researchers. A problem that was exacerbated by the inflation factor in research expenditures which has been running at a higher level than the general level of inflation.

In between the various speakers, those attending took part in a lobbying simulation in which they had to prepare positions, meet ministers, appear on hot-line shows and write press releases. With all that to do they were not let out to eat in the day but had to take their meals as working lunches so they could complete the task. The most eager participants were those old hands who were allowed to play the role of minister. Some of them became real tigers - which may have been partly explained by the fact that they didn't have to get elected. The deputy ministers in the simulation, were drawn from the professional staff of associations across the country. They were the real killers. Perhaps the opportunity to control faculty, and evaluate them, was too good an opportunity to be missed. If the cut and thrust of debate is informative then the battle of simulated lobbying is revealing!

## THE NEXT FOUR WEEKS

In the next four weeks the government of Canada will set the tone for the future part of this Mulroney ministry in the delivery of the speech to the throne and the presentation of the budget. CAUT, through the President, recently addressed this topic in a letter to the Prime Minister's office.

Dr. King called upon the government to deal with the financing of research and of the universities in a way that will encourage both university researchers and the general public to perceive a real commitment by the federal government in these areas both in terms of rhetoric and finance.

Again, the government was asked to implement the recommendations of the Lortie report: the doubling of the base budgets of the research councils over three years and then indexing them at one and a half times the rate of growth of GNP. This was linked to the need to increase funds for research in the area of environmental sciences.

On the topic of research funding the government was urged to pay attention to both the requirement for research into critical social issues and the development of an effective cultural policy, which must include support for humanities research and the Canada Council.

The question of transfer funds was also raised. There have been rumours circulating in Ottawa that the federal government is going

to introduce unilateral cuts in the transfer payments for post secondary education. This would not be at all out of character since both the Trudeau government and the last Mulroney government singled out transfers for post secondary education in cutting back federal government expenditure. Dr. King pointed out that these funds are designed to provide the university infrastructure without which there cannot be either effective university research or good teaching. He pointed out that such a unilateral cut would damage the federal/provincial relationships that the Prime Minister has done so much to improve in his last government.

Addressing a third area of federal responsibility, student aid, Dr. King encouraged the development of more effective policies in this area by pursuing the ideas developed by Mr. Crombie and Mr. Bouchard when they were Secretary of State.

It is evident that this government's intentions on post secondary education will be revealed in April. In raising these issues the President argued two points: that it would only be with a vigorous research funding policy that the government would prevent Canada from "slipping quietly out of the group of countries called the developed world." And that if Canada is to compete effectively with the U.S.A. then we would have to have effective universities and research.



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Diffusion totale moyenne: 27 000. Le Bulletin de l'ACPU paraît 10 fois au cours de l'année universitaire: le 1er de chaque mois de septembre à juin. Délai de réception des annonces: 13 jours ouvrables au moins avant la date de publication. Il ne sera pas accepté d'annulations après la date limite. Pour toute offre d'emploi, un délai minimum de 30 jours sera exigé entre la date de parution du journal et la date limite pour postuler le poste.

L'éditeur n'accepte pas d'annonces de postes d'administration et d'enseignement qui restreignent les candidatures pour des raisons de race, d'origine raciale, de religion, de couleur, de sexe, d'âge, d'état civil, de situation familiale, ethniques, d'handicap, d'orientation sexuelle, d'origine sociale ou de convictions ou d'attitudes politiques générales. L'ACPU s'attend à ce que tous les postes annoncés dans le Bulletin soient offerts aux hommes et aux femmes. Il incorpore à l'établissement qui a l'intention de faire paraître une annonce restrictive de fournir à la rédaction du Bulletin une déclaration énonçant ces raisons.

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## Nouvelles en brèves du Québec

par Susan Gray

The Thursday Report (Université Concordia)

Après trois ans de travail, quatre professeurs en informatique, Clement Lam, John McKay, Larry Theil et Stanley Swiercz, ont résolu un problème qui a représenté un grand défi pour les mathématiciens depuis le 18<sup>e</sup> siècle: trouver si le "plan projectif fini d'ordre 10" peut exister. La réponse est non.

L'équipe concordienne a dû programmer un superordinateur pour chercher la solution à travers 1 000 000 000 000 combinaisons, en faisant preuve d'ingéniosité: miser sur l'organisation et la programmation de l'ordinateur plutôt que sur la formulation des équations elles-mêmes.

Les compétences acquises au cours de cette recherche auraient des implications pour le développement des réseaux de communications et de la cryptographie. Selon le New York Times, des experts disent qu'aucun être humain ne pourrait comprendre tous les détails de la solution.

Toutjour selon le Times, il y a des mathématiciens qui doutent de la validité d'une preuve qui dépasse la compréhension humaine. Cependant, il y en a d'autres qui disent que si un autre ordinateur, suivant la même méthode, arrivait au même résultat, cela équivaudrait à une expérience en laboratoire.

L'équipe de Concordia a employé un superordinateur américain - un CRAY.

Un nouveau programme de premier cycle en génie minier sera offert conjointement par l'université McGill et l'Ecole Polytechnique.

Le secteur minier est très important au Québec car il est responsable de 24% des exportations de cette province.

Trois universités québécoises offrent un programme en génie minier, mais ce qui distinguera le nouveau programme des autres sera sa spécialisation dans l'extraction de minerais.

De plus, il sera bilingue, ce qui constitue un précédent. Roland Doré, directeur de l'Ecole Polytechnique, explique: "On est convaincu que nos étudiants seront confrontés tôt ou tard à la nécessité de la connaissance de l'anglais dans l'industrie minière." Les cours à la Polytechnique seront donnés en français, tandis que les étudiants/es auront le choix de la langue pour les travaux des cours qui ont lieu à McGill.

Le logiciel Safework, né d'une initiative de diplômés de Polytechnique, connaît un grand succès dans le milieu d'ergonomie. Robert Gilbert, président de Génicom, la société gestionnaire de Safework, et professeur à l'Ecole Polytechnique, revient de France où il a présenté le logiciel au ministère français de la Défense nationale, à la Société Aéro de Paris et à d'autres organismes.

Même si Safework n'est pas tout à fait au point (il devrait l'être d'ici un an ou un an et demi), ses performances sont tellement étonnantes que la société californienne MacDonald Douglass veut avoir l'exclusivité de la distribution du logiciel dans le domaine aérospatial. A part Génicom, les compagnies General Motors, Général électrique du Canada, Kraft et Squibb ont investi des ressources humaines dans le développement du logiciel; on peut chiffrer leur participation à deux ou trois centaines de milliers de dollars.

Le logiciel Safework, qui possède plusieurs particularités uniques, dispose de plus d'une centaine de modèles géométriques et biomécaniques pour des animations en 3D. Ceux-ci permettent un grand choix dans la conception de postes

de travail.

Les clients consultent Génicom pour deux raisons. La première: pour régler des problèmes précis qui se présentent; par exemple, lorsque les postes de travail ne sont pas assez fonctionnels ou ne satisfont pas aux normes de la Commission de la santé et sécurité du travail. La deuxième: la prévention de ces mêmes problèmes dès la conception.

\* \* \* \* \*

Un huitième partenaire, le Centre de recherche informatique de Montréal, vient de se joindre à Castorplus, un important projet consistant en la mise au point d'un système de conception par ordinateur consacré aux aménagements hydrauliques. Le projet est dirigé par un groupe de chercheurs du Département de génie civil de l'Ecole Polytechnique.

Ce système, destiné d'abord à des ingénieurs/es, est aussi approprié pour le travail des gestionnaires, des aménagistes et des écologistes. Avec Castorplus, on peut traiter de problèmes très grands comme l'assainissement des eaux, la construction des barrages, etc.

The Reporter (Université McGill)

Récemment (en janvier dernier), l'université McGill est devenue la première université canadienne à offrir un programme de 3<sup>e</sup> cycle en Sciences de réadaptation. L'université continue une longue tradition dans ce domaine car elle a été la première à offrir un baccalauréat en Physiothérapie et ergothérapie ainsi qu'une maîtrise en Sciences de la santé (réadaptation).Christina Hui-Chan, la directrice de l'Ecole de physiothérapie et ergothérapie, a dit qu'il avait fallu 10 ans d'efforts pour créer la "masse critique" nécessaire à une base scolastique qui est essentielle pour le programme de 3<sup>e</sup> cycle.

L'université McGill dispose de plus d'étudiants/es de deuxième cycle aptes à suivre le nouveau programme que n'importe quelle autre institution universitaire au pays.

Toute candidate/désirant obtenir un doctorat doit proposer un projet de recherche original. Comme on n'a pas encore engagé de professeurs/es, les quatre étudiants/es admis/es au programme travailleront indépendamment pour le moment.

Au fil des événements (Université Laval)

L'université Laval vient de mettre sur pied le Comité sur le placement étudiant, présidé par le doyen de la Faculté des sciences de l'agriculture et de l'alimentation, Marc J. Trudel, et y a nommé un coordinateur à temps complet, Jean Paul Albert.

Le Comité a annoncé son plan d'action le 24 janvier dernier, un plan comprenant 48 recommandations qui supportent deux objectifs: le premier est d'assurer une insertion socio-professionnelle des étudiants/es; le deuxième est d'aider l'étudiant/e à être plus responsable face à son insertion sur le marché du travail. Pour que tous les intervenants en matière de placement atteignent leurs buts, il faudra une collaboration étroite entre les structures déjà en place et le nouveau Comité.

## TO THE EDITOR

In the debate provoked by the racial theorizing of University of Western Ontario Psychology professor Philippe Rushton, many have asked how matters could have been allowed to reach the present point, with tenure- and award-granting subject to peer review the way they are. Bureaucratic tolerance for in-group "backscratching" has indeed permitted results to develop which can erupt into scandal in a case like this.

Fortunately, the tolerance is not uniform. I know of no Canadian university History Department where proponents of the "no holocaust" theory of World War II, whatever their other qualifications, could even teach part-time. Are not Blacks entitled to similar protection against baseless "academic" slanders?

Yours sincerely,

Dan Goldstick

Department of Philosophy  
University of Toronto

## CAUT voting on Memorial censorship

As we go to press, the Council of CAUT is engaged in a mail ballot on the question of lifting its censure of the President and Board of Regents of Memorial University. The details of an agreement have been worked out between CAUT, Memorial University and the Memorial faculty association (MUNFA) in the course of reaching the first collective agreement between the university and its academic staff. Should

Council agree to the terms of the agreement, censure will be lifted.

The censure of Memorial has been in place for nearly ten years and arose from the failure of the university to renew the contract of professor Marlene Webber, a faculty member in the school of social work.

Another long standing censure that CAUT had in place, that of the University of Calgary, was lifted late last year.

## CENSURED ADMINISTRATION

Censure means that CAUT has concluded that a university administration has breached one or several of the fundamental principles of academic freedom and governance which CAUT believes to be indispensable to the proper functioning of a university. It also means that the university administration has resisted all reasonable suggestions from CAUT for a resolution of the dispute. Censure is a notice to all members of CAUT that they should inform themselves, in their dealings with a censored administration, of the issues involved in the censure. In particular, CAUT members are asked not to accept appointments at a censored university; not to accept invitations to speak or attend academic conferences at a censored university; and not to accept any distinction or honour that might be offered by a censored administration. Faculty members employed at a university whose administration is under censure are asked to support and assist efforts to convince the administration of the necessity for a settlement of the dispute. Advertisements for positions vacant in universities under censure are not carried in the CAUT Bulletin.

CAUT recognizes, of course, that censure imposes a burden on members of the academic staff and students at censored universities. It is the view of the association, however, that censure, and the sanctions associated with it, is necessary both to publicize the unsatisfactory conditions which exist in the censored university and to persuade the censored administration that it should adhere to standards now widely accepted in the Canadian academic community.

The following administration is under CAUT censure.  
President and Board of Regents, Memorial University of Newfoundland (1979)

Censure was imposed when the appointment of a member of the School of Social Work was not renewed under circumstances which suggest that her political views were unacceptable to the University administration and when the administration and Board of Regents were unwilling to agree to a fair procedure to determine whether the faculty member had been fairly treated.

Full information on the above censure is available on request.



# President's message/Le mot du président

University research in this country continues to be an item of major concern to CAUT. Despite a great deal of effort on our part and a greater amount of rhetoric on the part of government, it appears that there are more questions than answers.

In his address to delegates at the recent CAUT Lobbying Conference, Arthur May, the President of NSERC, left us with three sobering thoughts:

- the number of good University research projects which NSERC is unable to support through lack of funds is increasing steadily;

- fully 11% of renewal applications will not be funded this year, thus narrowing the base of active researchers in the areas funded by NSERC still further;

- the recommendations of the Lortie Commission (to double the base budgets of the Granting Councils over three years and thereafter to index them at 1.5 times the growth rate in GNP) would prevent Canada from "slipping

quietly out of the group of countries called the developed world".

Sobering thoughts. And there are others. The base budget of NSERC was increased by only 2.3% this year — roughly half the inflation rate. Again, underfunding the operating budgets of the Universities and the consequent cutbacks in available monies for the infrastructure supporting research has made some Universities question whether they can afford to accept certain research awards.

In these anxious days before the new Throne Speech and Michael Wilson's anticipated budget, it is interesting to recall the Prime Minister's 1984 commitment to double Canada's R and D spending to 2.5% of GNP and sobering to observe how far off the mark we in the Universities have fallen. Is the expertise of Canadian university researchers to perform the fundamental research so desperately needed by this country to become a wasted resource?

On the matter of targeted research,

CAUT's position is clear — and utterly defensible. Applied research — contract work even — may well have a place in universities, but not when it displaces the basic, fundamental research which is our principal research mission. If we in the university do not fulfill this role, who will?

Paule Leduc, President of SSHRC, also spoke at the Lobbying Conference. It is clear that there are a number of concerns in regard to SSHRC in addition to the chronic underfunding which continues to plague it. Responses to the first draft of the latest in a seemingly never ending series of reviews of SSHRC, the Courtney Report, are in and, according to Paule Leduc, Courtney Report 2 will be out in April. CAUT's response to Courtney has been sent to all member associations and summarized in the *Bulletin*. My major concern is that repeated reviews of the operation of SSHRC will in themselves do little to assist those researching the social sciences and humanities. We should put

a hold on navel gazing and attack the real problem. The country needs research on the environment and, for example, the economic and social effects of environmental legislation. We need research on critical social issues such as the cultures and societies of this country's trading partners, the role of women in our society and native issues. And we surely need a vigorous cultural policy encouraging the study in Canadian universities of the humanities.

It is frustrating to realise how much university research could contribute to these, and how stifled we will become if funds are not available. CAUT must continue to adopt the most vigorous lobbying stance it can. Encouragingly, we have been offered the support of the Councils themselves in the form of various useful data. But we, the researchers, must continue to accept the responsibility of lobbying government for adequate funding of Canadian university research.

La recherche effectuée dans les universités canadiennes demeure encore au cœur des préoccupations de l'ACPU. Toutefois, bien que nous ne ménagions pas nos efforts et que le gouvernement y emploie toute sa rhétorique, il semble toujours y avoir plus de questions que de réponses.

Dans son allocution à l'intention des participants à la récente conférence sur le lobbying, Arthur May, le président du Conseil national de recherches du Canada (CNRC), a soulevé trois points qui portent à réfléchir :

- le nombre de projets de recherche universitaire valables que le CNRC ne peut subventionner faute de fonds augmente constamment;

- cette année, on devra refuser au moins 11 p. 100 des demandes de renouvellement, ce qui réduira encore davantage la base des chercheurs actifs dans les domaines subventionnés par le CNRC;

- les recommandations de la Commission Lortie (le rapport Lortie recommandait de doubler les fonds initiaux accordés aux conseils subventionnaires pour ensuite les indexer à l'équivalent de 1,5 fois le taux annuel de croissance du PNB) empêcheraient le Canada de glisser tranquillement hors du groupe des pays qu'on appelle industrialisés.

Voilà qui donne matière à réflexion. Et on pourrait facilement allonger la liste, quand on pense que cette année, les fonds initiaux du CNRC n'ont été augmentés que de 2,3 p. 100 - à peine la moitié du taux d'inflation. Une fois de plus, le sous-financement des budgets de fonctionnement et les réductions subséquentes des sommes disponibles pour l'infrastructure de recherche ont incité les universités à se demander si

elles peuvent se permettre d'accepter certaines bourses de recherche.

En ces jours d'inquiétude qui précèdent le Discours du Trône et le dépôt du budget de Michael Wilson, il est bon de se rappeler l'engagement du Premier ministre qui, en 1984, disait vouloir doubler les sommes destinées à la R-D pour les porter à 2,5 p. 100 du PNB. Il est également intéressant d'observer combien les universités ont dévié de leur chemin. Les compétences si utiles des chercheurs universitaires qui travaillent dans le domaine de la recherche de base deviendront-elles une ressource gaspillée?

En ce qui concerne la recherche orientée, la position de l'ACPU est on ne peut plus claire - et tout à fait justifiable. La recherche appliquée - et même le travail à contrat - a peut-être bien sa place dans les universités, mais pas si elles viennent supplanter la recherche de base ou fondamentale, qui constitue en fait notre vocation première à cet égard. Après tout, si les universités n'effectuent pas cette recherche, qui le fera?

Paule Leduc, présidente du Conseil de recherches en sciences humaines du Canada (CRSH), a également pris la parole au cours de la conférence. Outre le sous-financement chronique avec lequel doit constamment composer le CRSH, on a soulevé un certain nombre de questions sur le Conseil. On reçoit actuellement des réactions à la première ébauche du Rapport Courtney, la dernière étude d'une série apparemment sans fin sur le CRSH. Paule Leduc prévoit que le deuxième rapport Courtney sera publié au mois d'avril prochain. L'ACPU a fait parvenir à tous ses membres sa réponse au rapport, réponse dont on a d'ailleurs publié les grandes lignes dans le *Bulletin*. Je crains par-dessus tout que ces études

répétées des activités du CRSH n'aident pas vraiment les chercheurs qui travaillent dans le domaine des sciences humaines. Nous devrions arrêter de nous regarder le nombril et nous attaquer au vrai problème. Le pays a besoin de la recherche sur l'environnement, entre autres de la recherche sur les effets économiques et sociaux de la législation régissant l'environnement. La recherche sur des questions sociales de grande importance, comme les cultures et la population des partenaires commerciaux du Canada, le rôle des femmes dans notre société et les questions relatives aux autochtones, est essentielle. Et on a certainement besoin d'une politique culturelle solide qui vienne encourager l'étude des sciences humaines dans les universités canadiennes.

Il est très frustrant de constater combien la recherche universitaire pourrait contribuer à tous ces éléments, et combien nous serons étouffés par un manque de fonds disponibles. Lorsqu'elle effectue son lobbying, l'ACPU doit toujours adopter la position



Peter King

la plus dynamique qu'elle peut. Fait encourageant, les conseils eux-mêmes nous ont accordé leur appui en nous fournissant plusieurs données qui s'avèrent des plus utiles. Mais en tant que chercheurs, nous devons continuer d'exercer des pressions auprès du gouvernement afin qu'au Canada, la recherche universitaire soit financée adéquatement.

## On the use and misuse of grant size

The following paragraph is an excerpt from a memorandum which the President of NSERC, Dr. Arthur May, sent to university presidents in March, 1988. It was labelled "Use or misuse of operating grant size".

Over the last year, I have become increasingly concerned by the extend to which the operating grant level is used as the absolute "measure of the researcher" especially in tenure, advancement, salary decisions etc; this worries me. Such university decisions are normally made in a much broader context that the terms of reference given to an NSERC discipline grant selection committee. Furthermore, correlations of funding with quality are too frequently made by individuals who are not fully aware of the extent to which the cost of research is a major criterion for operating grants; therefore, researchers of comparable activity and productivity in a given discipline often have different grant sizes. Comparisons amongst disciplines are even more dangerous to make. With the current budgetary pressures forcing our peer committees to be very selective and with Council's desire to provide opportunities to do high cost research, I urge caution in any attempt to assess stature on the basis of research grant size.



# Academic Freedom, Tenure and Unpopular views

by Peter R. King  
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Teachers

Canadian faculty members will welcome the way in which many voices have spoken up in recent weeks to defend academic freedom. At the same time several commentators, the *Globe and Mail* among them, seem to have misunderstood the nature of academic freedom, the reasons for its existence and protection at the universities, and the attendant responsibilities, which I believe universities have to their students and the community.

First of all, university professors undoubtedly have the same rights as private citizens to express political, social or economic views, to the media or in any other public forum. This should be true however unpalatable such views may be. There has been a long battle in this country to secure this right. There was a time when the President of the University of Toronto, for instance, held that university professors should be treated as civil servants, free with respect to their teaching in the classroom but muzzled elsewhere. To this day some university administrators and board members continue to act as though this should be the rule - professors should not rock the boat, they say, when the university has to deal with private patrons, sensitive governments and the like, none of whom usually appreciate anything other than total blandness. In political terms such pressure is more frequently applied to the Left than the Right, for obvious reasons. These days the issue does from time to time arise, however, in connection with views from the extreme Right, whether allegedly neo-fascist, racist or from supporters of views similar to those of the rulers of Iran. The opinions in question may be far from the middle ground, but it is better to tolerate than to repress. Rules to suppress the Right will almost certainly be used in time to suppress the Left. Furthermore the Right is much more likely to be able to exercise the power to discipline since they are more frequently in power. Why give them extra tools?

What protects professors from reprisals by politicians, board members or colleagues who dislike their views is tenure. A tenured professor can only be dismissed for gross incompetence, persistent neglect or moral turpitude, established before an independent arbitration or tribunal. The job of the arbitrators is to find out whether the reasons for the proposed dismissal are sound or whether they mask unstated reasons such as political prejudice. This is the essential meaning of tenure, and it is logically inconsistent of the *Globe and Mail*, for instance, on the one hand to urge the defence of academic freedom but elsewhere to oppose tenure which provides the sole practical guarantee for that freedom.

University professors should also have the right to choose freely their topics of research and to publish the results. This is important because research must not simply become an instrument of the wishes of the establishment. Some research ought to challenge accepted views, for how else can society make progress in such areas as health and toxicology, the environmental sciences and the social sciences. However, CAUT believes that there are obligations that go with this right. For example, the research must be made public as should the sources of the funds. University professors cannot claim the free market of ideas unless that market is truly free and open. Research, whether for government, private industry, or any other agency, which is intended to remain secret ought not to be undertaken by universities since the results of

**R**ecent publicity surrounding the research of Professor Philippe Rushton at the University of Western Ontario has resulted in further debate — not all of it well informed — on the questions of academic freedom and tenure.

While we should be pleased that academic freedom has been defended by most commentators, we should be concerned that the meaning of academic freedom and its relation to tenure is not as well understood as it should.

such research cannot be subject to public debate. Furthermore professors have an obligation to declare the sources of their grants because it is reasonable to debate whether or not the source has tainted the research. This would apply, for instance, to a professor who undertook paid research from the tobacco industry on links between tobacco and cancer. We should not prohibit the research but we should know where the money comes from. Universities should have rules insisting on both these points.

Universities have got themselves into something of a bind by insisting that all applications by individuals for outside grants should be vetted by the university administration. This has the unfortunate effect of making it appear that the university approves the research in the applications it allows to go forward. It is reasonable for the university to want to know and approve any use of the university facilities or any serious encroachment on the professor's time for teaching. It should also require disclosure of significant research commitments and the sources of funding. But it should not go beyond that.

However, the situation changes when professors decide that their research should be part of their academic record and thus part of their claim to the continued holding of their post. Why should this be so? University professors hold their positions as a consequence of qualitative judgments. Initial appointment, the granting of tenure, certain salary decisions, and promotion all involve judgments regarding the quality of the teaching and research of the individual involved. Peers in a university department thus have an obligation to judge the quality of teaching and research for promotion, merit, and the like, according to their local by-laws or collective agreement and according to the norms described by CAUT in its document "What is Fair?". Who should do this? The short answer is the experts in the field. This is where peer judgment is involved. It is also the moment when prejudice and pressure can be applied surreptitiously to ensure that only certain peers are asked or that only mainstream research is approved. CAUT policies provide safeguards against such unfairness.

There has already been a formal independent hearing at the University of Western Ontario which held that a tenured post was not a sinecure and that the university had the right and obligation to judge the quality of the teaching, research and service of the individual. In this case the tribunal upheld the right of the university to fire the tenured professor concerned. In two recent cases in the medical area at Harvard, researchers were forced to leave the university as a consequence of allegations of research fraud and, in one case, questionable research methods as well. On the other hand, when professors receive favourable decisions in regard to their performance, they have every right to assume that a favourable judgment has been made on the quality of their teaching and research. Not, of course, in the case of research, a judgment on whether the research was wise, useful, or in the main stream, but whether or not it followed accepted scientific norms in the gathering and use of evidence, etc. If the research failed to follow such scientific norms without a good reason for doing so (for example, a challenge to a

particular scientific methodology), then the department has the obligation to make a negative judgment.

If the questions raised about the teaching or research of an individual are sufficiently grave, then the university administration has an obligation to institute appropriate disciplinary sanctions up to and including dismissal. In almost all Canadian universities the decision to move towards dismissal is the responsibility of the President. The President's judgment would, of course, ultimately be tested before an independent arbitration or tribunal as noted above, unless the professor chose to resign. Here tenure protects the right of professors to choose unpopular research themes and to publish the results of that research, but it does not protect them from the consequences of shoddy research.

On the other hand, if a professor considers some of his or her research a private hobby and not part of their university record, the university should have no official interest. After all professors have conducted research, written and advocated all manner of views in areas outside of their formal academic expertise, from the merits of vitamin C to world federalism, without necessarily claiming that this work should be part of their official university research record.

An even more difficult question arises about teaching. Professors should be able to express their opinions in the classroom without censorship. They should be free to present those views with vigour. On the other hand professors and their departments have an obligation to that pluralism which is a necessary element in a civilized education. Thus professors should ensure that positions opposite to theirs are discussed and debated in the class, particularly when controversial matters are at issue.

An important, related question concerns the right of professors to invent courses on any subject they want. Such a right is certainly limited. Professors must convince their department and usually the university senate or general faculties' council of the merits of any proposed course. The resources of the university are limited. It may prefer to invest in something else. It may consider that enough courses are offered in the area. It may not have enough books in the library or space in the laboratories. Universities should not use this power in order to promote blandness and discourage controversy. It is ultimately the

responsibility of university senates or general faculties' councils to judge if new courses are warranted, intellectually stimulating, within the budget of the university, and deal suitably with contentious material.

Are there other responsibilities relevant to this discussion which the university ought to consider? I think there are, although here I am speaking for myself, not necessarily for CAUT. It seems to me that the university has an obligation to ensure that its students are exposed in a formal way to a sophisticated discussion of the roots of western civilization, of the history, politics and economics of this country, and of the civilizations of other non-European peoples. They also have a responsibility to ensure that all students have a basic understanding of scientific methods and what can be achieved, for good or for evil, by the use of science. Universities have talked a lot about this obligation but not done very much about it, usually retreating into bromides about how impossible it would be to create such a curriculum. At the moment the major research universities in the United States are wrestling with this very problem, particularly the third of these issues, how they can ensure that their students know about the non-European world and about the history and culture of the substantial minorities in the United States? Perhaps one statistic will tell us why this is so important. This year 53% of the undergraduate body at the Berkeley campus of the University of California is Mexican, African-American, Asian or North American Indian.

I believe the university also has an obligation to search out research funds from government, industry and the foundations to ensure that there is research about the real questions involved in a multicultural and multi-racial society such as our own. Given the current population mix in areas such as Vancouver, southern Ontario, Halifax or Montreal, all the major research universities should ask themselves what they are doing in this area and, if the answer is not very much, what they intend to do about it.

Academics must have the freedom to pursue intellectual interests and to publish the outcome of their research. They must have the freedom to teach what they believe to be important within the framework of a pluralistic debate. In this way the community at large will be well served by some of the best minds in the country. Students too will be well served in receiving a civilized, liberal and stimulating education. The guarantee of such academic freedom is the institution of tenure. Let us remember that fact every time an academic is involved in a public controversy. In appreciating the freedom we should not lose sight of the protection which makes it possible.

## CONFIDENTIALITY CRITICIZED

In a recent arbitration Martin Teplitsky, Q.C. made the following remarks with respect to confidentiality opinions:

Mr. Sack submitted that the confidentiality flows from a misinterpretation of *Slavutych v. Baker*, (1976) 1 S.C.R. 254. In that case the criticism was confidential because it was promised to be confidential. Similarly, Galligan, J. in the Divisional Court in *Re Ruiperez* assumed that an offer of confidentiality was necessary to secure opinions. I am unable to detect any legitimate interest in confidentiality when the person (i.e. a colleague or department head) tenders a criticism in

respect of a person who has no power to injure his critic. Although confidentiality in the area of criticism is likely to spawn criticism, it is equally likely to foster irresponsible criticism.

Indeed Slavutych itself is an example of intemperate criticism protected by confidentiality. In my opinion, if an equal is unwilling to criticize without a protective cloak of confidentiality, the criticism is better left unsaid. It is unfair to the person criticized not to know the course of criticism. Without such knowledge the person criticized is in no position to challenge the objectivity of the critic.



## THE FADING ECONOMIC STATUS OF THE ACADEMIC

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Academics are not paid well. There has been a dramatic decline in the relative salaries of the academic population over the past two decades. The deterioration in salaries of academics compared with the salaries and wages of other Canadians is displayed in Figure 1 where the changes are compared with the consumer price index for the years since 1971. The situation of the typical Canadian has shown some improvement whereas that of the typical academic has worsened considerably. Academics have lost about 20% relative to the average Canadian.

Does the average Canadian realize the plight of the academic? Does the average Canadian know that the typical academic entering the profession in the last twenty years can expect to earn less in her or his lifetime than the typical tradesperson or school

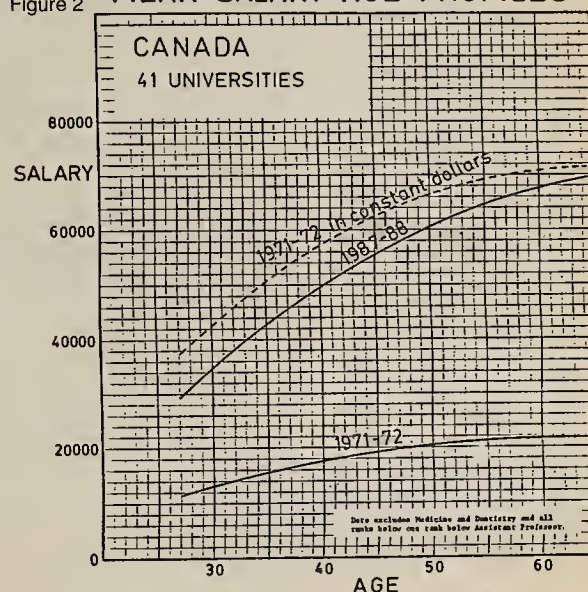
Some of the sections seem not to be about salaries but are relevant because of their bearing on planning and costing of salaries and on the understanding of academic salaries. Given the possibility that some readers may not wish to read the whole article (although the author would like to believe otherwise), the following graph and table are presented here although they are not discussed until later in the article. Figure 2 and Table 1 illustrate average salary versus age.

## THE SHIFTING DEMOGRAPHY

Each year the 'average academic' ages one half year. This statement might suggest to some readers that academics have found the fountain of youth in that they have managed to cut the ageing process in half. Unfortunately, this is not what the statement means. It means that since the end of the high growth era of Canadian universities two decades ago, the 'academic growth bulge'

Figure 2

### MEAN SALARY-AGE PROFILES



slave, a manufacturing company, tradespersons such as carpenters, school teachers, and academics.

Salary increases for the master and slave system are easily analysed. The slave receives what the master gives her or him. A benevolent master may give wage increases and a wicked master may not. Barring revolution, the slave is locked in this position.

The manufacturing company has individuals filling different positions. A floor sweeper does not perform the same task as the president. If all salaries within the company are increased by  $X\%$  or  $\$Y$  or whatever, the rate for each of these positions is increased. The individuals holding these positions receive  $X\%$  or  $\$Y$  or whatever the general increase is. This system has 'career progress' salary increases in the following way. An individual may be promoted to a different level of responsibility and receive a higher rate of pay. This salary increase is separate from the general increase.

The carpenter or other tradesperson usually goes through a period of apprenticeship. A typical system may have four years

of apprenticeship during which time the person is paid 55%, 65%, 75%, and 85% of the journey-person rate. For all years after this, the person receives the same rate except for the general salary increases. Prior to reaching this plateau, the person receives 'career progress' as well as any general salary increase.

The teachers' system usually has a rigid scale or grid but with a longer 'aging' period than the tradesperson. Typically, the rising portion is twelve years. Individuals who are on the plateau receive general increases whereas those who are still on the 'training' part receive a career progress increment as well as the general increase. We should point out that a few individuals may be receiving salaries above scale because of special duties such as counsellor, head teacher, principal, etc.

We should point out that not all salary scales are rigid. Some are minimum scales. For example, musicians and reporters usually have minimum scales. A person can be paid more than the scale dictates but not less.

Now we will turn our attention to academics. Judging by the current salary

Figure 3

teacher? Does the average Canadian know that the typical academic can expect to earn less than half as much in a lifetime as dentists, lawyers, and accountants who usually spend much less time in education and training than the typical academic? Not only is the public unaware, but too often academics themselves are myopically unobservant of the declining economic position of the profession.

The fading economic status of the profession is illustrated in this article by graphs and tables of data. Some aspects of academic salaries which play a significant role in the misunderstanding of academic salaries and in the planning of salaries by Universities are also discussed in this article. The readers of this article probably range from the naive to the expert. We will risk boring the latter in the interests of the former. The article is divided into sections.

is moving through the demography, Figure 3 and Table 2 illustrate this changing demography. In an ideal situation, the average age would not increase at all. It should be pointed out that it is not the existence of the 'peak' in the demography but rather the shifting of this peak with time which leads to problems in the funding of academic salaries. The demography need not be uniform for relative cost stability of salaries. The funding of salaries is affected by the increasing of the average age towards the higher paid end of the salary system.

## CAREER ADVANCEMENT SALARY INCREASES

One aspect of academic salaries which is often misunderstood is career progress and its separation from general salary increases. To illustrate this concept consider the following groups: master and

Table 1

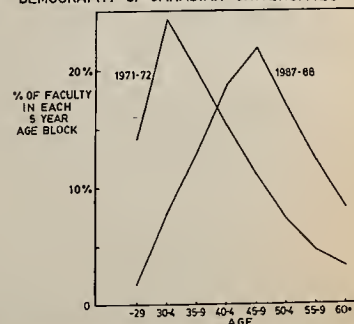
AVERAGE SALARY VERSUS AGE							
Age:	30	35	40	45	50	55	60
1971-72	12989	15381	17394	19027	20281	21155	21649
1987-88	34762	42602	49504	55470	60500	64593	67750
Percentage	167.6%	177.0%	184.6%	191.5%	198.3%	205.3%	212.9%

EFFECTIVE MEAN SCALE INCREASE = 188.5%  
CHANGE IN CONSUMERS PRICE INDEX DURING PERIOD = 227.4%

AVERAGE AGE OF ACADEMIC  
ACADEMIC POPULATION

Year	Average Age
1971-72	39.1
1972-73	39.6
1973-74	40.3
1974-75	40.8
1975-76	41.3
1976-77	41.7
1977-78	42.2
1978-79	42.7
1979-80	43.2
1980-81	43.7
1981-82	44.2
1982-83	44.7
1983-84	45.2
1984-85	45.7
1985-86	45.9
1986-87	46.2
1987-88	46.6

## DEMOGRAPHY OF CANADIAN UNIVERSITIES





structure of academics, we might conclude that they have lifelong 'ageing' periods. Salaries, whether governed by a rigid scale or by a flexible system, essentially have no plateau. The average 60 year old academic earns somewhat more than the average 50 year old who earns more than the average 40 year old, etc. Career progress salary increases appear to go on forever in most systems. Whether this should be true or not is questionable. Certainly, this salary versus age does not correspond to performance versus age of the average individual. At the very least we must say that this aspect of academic salaries results in misunderstanding by the public and also probably results in lower salaries than otherwise might be the case. Often academics themselves as well as the public don't understand that part of the salary increase is career progress and that the total increase received by individuals should not be compared with salary increases of other groups.

#### WHAT DOES THE GENERAL INCREASE?

A general salary increase (i.e., excluding any career progress component) is a salary increase to reflect changes in cost of living and changes in productivity of the economy. If all prices were doubled tomorrow, then a doubling of all salaries would leave everyone in the same position. Or would it? Immediately to mind comes the thought that it depends on whether one has debts or credits outstanding. If you have a mortgage, high inflation 'wipes out' the money you owe. On the other hand, the person holding the mortgage may lose the relative value of the investment.

It is not easy to develop an index to truly measure the 'cost of living'. The most widely used index, the consumer's price index, is a measure of the changing cost of a standardized basket of goods. This basket of goods is chosen to reflect how people spend their money, and the weighting put on various items is changed occasionally to reflect changing spending patterns.

A consumer's price index is also maintained for each of the larger cities. It should be pointed out that these indices compare the total price of a basket of goods to the price in a base year for the respective cities. These indices show time trends; the differences do not indicate differences in cost of living between cities. The problem of

making intercity comparisons of the 'real cost to live' is a very difficult one although some Statistics Canada studies have been done. Spending patterns are different in different regions. People buy umbrellas and yachts in Victoria but mosquito nets and snowmobiles in La Tuque. It is easier to make regional comparisons at the poverty level (basic essentials) than at the average income level.

We should point out that it is not always possible for wages to keep pace with the price index, something which is often demanded as a minimum wage increase. The economy of the country is not isolated from the rest of the world. Sometimes the price index is highly affected by changes in price of a component which is produced elsewhere. For example, suppose all Canadians drank one litre of wine per day and the price of wine suddenly tripled in the world. The consumer's price index would increase, but obviously we could not have wages increase to keep pace. Since wine is not produced in Canada, the price rise would reflect external conditions. The remainder of

change. If the price of wine tripled, wine consumption may decrease and beer consumption increase.

As mentioned above, productivity as in the economy lead to real general salary increases. The economy is usually able to produce more efficiently as time goes on. The gains in efficiency are not uniform in space and time; some industries make large gains and others make none. However, general salary increases should reflect the average productivity gain in the economy. One sometimes hears that general salary increases for increased efficiency should go only to the particular industry in which there are gains. This is a unquestionable argument. Clearly the possibility of increases efficiency for the keeper of the lighthouse or the traffic director is virtually impossible. (Unless automatic signals are installed!) On the other hand, has the desk receptionist at an electronics firm increased his efficiency just because some scientist has made a great efficiency gain in chip production. Should she, the scientist, alone receive all the benefits of the gain? Although some industries may lag others in

grow from inexperienced young academics to experienced old ones. Career progress through the ranks salary increases are meant to reflect changes in the productivity of an individual as he or she gains experience and should not be considered compensation for overall changes in the productivity of the national economy. Gains in the productivity of the whole economy should be reflected in the general salary increase. Testing of any salary system over historical periods will easily show that this must be the case.

Another question concerning salary increases which leads to misunderstanding and confusion is whether all salary levels in society or a group should increase by equal percentage, equal dollars, etc. Does inflation affect all salaries in the same way? If the price of a Ferrari increases more rapidly than the price of a loaf of bread, should we increase high salaries more than low salaries? (Perhaps not. If you bought a Ferrari last year, you will not have to buy another this year!) If the economy increases in productivity, should we apportion this increased production among individuals in proportion to their present salaries, i.e., percentage basis? Should we distribute it evenly on a dollar basis? Should we use it to boost the lowest end of the income spectrum? Should we use it to re-establish a nobility? Even these four possibilities would each have many advocates (with the possible exception of the last).

#### SALARY COMPARISONS OVER SPACE AND TIME

How does one compare salaries at Tamarack University with salaries at Black Fly University? How does one compare salaries at Beaver University this year with salaries at Beaver University three years ago?

Salary comparisons over space and time are not trivial. For example, we could compare the average salary for all faculty members. This average is affected by demography and this fact makes this average almost useless. Salaries for older individuals are higher on average than for younger individuals. Therefore a higher average salary for a group may reflect that the group has an older demography.

We could compare average salary for each rank. Some of the demographic effects are reduced by this, but problems still remain. Promotion rates may differ over space and time.

A better way of making comparisons is to examine mean salary versus age. We call this 'Effective Mean Scale'. Some readers may find the mathematics of this concept puzzling whereas others may find it trivial. In any case, Figure 2 shows mean salary-age profiles for 1971-72 and 1987-88. The information is also displayed in Table 1 for those who are frightened by graphs. Figure 4 shows data for 1987-88 including profiles for each rank. Comparison over space and time of salary age profiles for each rank may be misleading because promotion patterns may vary with time.

In order to compare salary increases among universities or with other groups, we have developed an Effective Mean Scale Increase. This is simply the average increase in the Effective Mean Scale, calculated using the demography as a weighting function. This Effective Mean Scale Increase (EMSI) is a much fairer measure for comparing increases among universities and with other groups. In more mathematical terms we can define EMSI as a sum or integral (see Figure 5).

YEAR	COMPOSITE WAGE INDEX	FACULTY EMSI INDEX	INDICES ADJUSTED TO 1971 DOLLARS
1971	100.0	100.0	100.0
1972	108.4	104.2	103.4
1973	116.6	109.4	103.5
1974	129.4	112.5	103.5
1975	147.7	134.9	106.6
1976	165.7	147.4	111.3
1977	181.6	157.2	112.9
1978	192.8	165.1	110.1
1979	209.4	175.0	109.5
1980	230.6	191.3	108.9
1981	258.1	214.1	108.2
1982	283.9	236.9	109.4
1983	303.8	247.1	109.4
1984	317.0	253.2	108.9
1985	328.0	264.4	107.5
1986	337.1	274.9	105.8
1987	346.3	285.5	87.2

#### Footnotes

1. Year is calendar year for Composite Wage and CPI and is the Academic year starting July 1 of the calendar year for the faculty.
2. Composite Wage Index is formed from changes in Average Salaries and Wages. Statistics Canada.
3. Faculty Index is formed from Effective Mean Scale Increase for the 41 universities used in this analysis. All Quebec universities and a few other small ones were excluded for missing data for most years.

our economy could continue to operate in exactly the same way. (This example also illustrates how spending patterns might

the ease of giving salary increases, the average worker should receive a productivity increase based on the average for the whole company.

A better measuring index for comparing general salary increases is the average weekly earnings in Canada. This more truly reflects how salaries and wages are changing in the whole economy. Using this index over long time periods still has some difficulties. The lower paying service sector is growing more than the industrial sector. Also, the changing family and number of working parents leads to changes in the base for the index. In addition, Statistics Canada recently redefined the basis for this wage index to include all workers rather than those in certain industries. However, this wage index is still probably the easiest index to use.

One point which must be emphasized is that general salary increases should reflect economic change in the overall economy. Subject to some of the points raised above, this usually means inflation plus average productivity gains in the overall economy. There is often misunderstanding of this point. Some individuals confuse overall changes in productivity of the whole economy with the changes in productivity of individuals as they

Figure 4 MEAN SALARY-AGE PROFILES

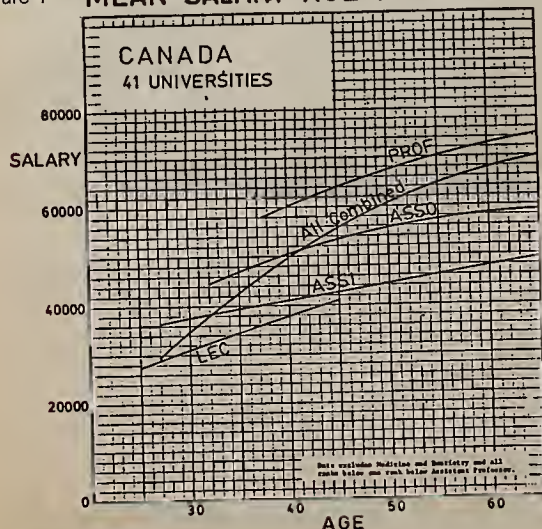


Table 4

Male-female difference in average salary	\$8151	14.85%
Corrected for Age dependence	\$4225	7.70%
Corrected for Faculty and age	\$3167	5.77%
Corrected for discipline & the above	\$2271	4.14%
Corrected for Rank & the above	\$542	0.99%



Figure 5

$$EMSI = \frac{100}{N_T(t_1) + N_T(t_2)} \sum_i \frac{[S(A_{i,t_2}) - S(A_{i,t_1})]}{S(A_{i,t_1})} [N(A_{i,t_1}) + N(A_{i,t_2})]$$

$$EMSI = \frac{100}{N_T(t_1) + N_T(t_2)} \int \frac{[S(A,t_2) - S(A,t_1)]}{S(A,t_1)} [N(A,t_1) + N(A,t_2)] dA$$

society is even more alarming.

Table 1 illustrates the mean salary age profile and the percentage changes for the group of 41 universities included in this study.

Trends are shown in Table 3 where an index based on Canada Average Wages and Salaries, and an index for University Faculty, and the Canada Consumers Price index are listed. The last two columns show the wages and salaries indices in terms of real (1971) dollars. Figure 1 displays these adjusted wage indices. The trend for academic salaries is alarming.

### SEX AND OTHER DIFFERENTIALS

A topical issue is the concept of 'equal pay for work of equal value'. This issue has evolved from an older issue of 'equal pay for equal work'. The concept of equal pay for equal work is simple; two individuals performing the same job with the same output should receive the same pay. The concept of 'equal pay for work of equal value' is not as simple; it necessitates a measurement of value of a job function. It requires that we be able to declare that the performance of Job A is as valuable as the performance of Job B. Is the cleaning of sewers as valuable as the answering of telephones? Is the job of teaching and research performed by a Professor of Chemistry more or less valuable than the tasks performed by a Professor of Classics? Is the maintenance of the university plumbing more or less valuable than the teaching of law? Does the coach of the football team perform a service more or less valuable than the Professor of Marketing? Etc.

The concept of 'equal pay for work of equal value' is not accepted by everyone with the same meaning. Some individuals argue that salaries and wages are determined in the market place. Wages for a given job rise until enough workers are attracted to that occupation, etc. Attempts in the past to dictate wage rates have not been very successful.

Within the academic place, we may not have even satisfied the 'equal pay for equal work' doctrine, yet alone the 'equal pay for work of equal value' concept. Some academics argue that inequities exist: some groups or individuals receive less salary than others for the same performance. Unfortunately, analysis of available data is not always easy or straightforward.

It should be pointed out that some people interpret 'equal pay for equal work' as meaning that every academic should receive the same salary. This is not a necessary consequence of the 'equal pay for equal work' concept. Individuals who wish to argue for or against equal salaries for all should separate that concept from the one being discussed here. Most academics would probably argue that higher performance should warrant higher salaries. Most academics usually classify their own performance as high. Usually they think their salaries are too low relative to others.

*"98% of academics place themselves in the top 2% of their profession."*

Anon

This tends to confuse the issue of equity in salary policy. Analysis usually shows that an individual salary is affected more by the market in a particular discipline at hiring or afterwards, a person's age, the existence and nature of salary increase policy, etc., and less by performance. Many academics insist the contrary is true and that salaries are strictly determined by merit although some go to the other extreme and essentially say that merit means almost nothing in salaries.

*"The grindstone is the wrong place to keep your nose"*

Anon

In any case this section does not deal with the question of merit; it deals with possible identification of class inequities and with interpretation of data.

The following discussion of salaries is directed at the possible existence of a male-female differential. Other class inequities are sometimes revealed in such analysis. No absolute conclusion is drawn because the analysis may have insufficient data. The author has carried out analysis with additional data for a limited set but the results will not be presented here. This article deals only with data which is usually on computer file at every university.

A word of caution should be emphasized when doing any mathematical fitting of data. This is especially true if one is dealing with small samples. Even with the larger universities, the problems of analysis are plagued by the huge spectrum of variables and parameters. Each variable can have many different values. For example, age can range from about 25 to 65, although age is easier to handle because the natural assumption is that salary is a monotonic function of age. Other variables are less tractable. There are almost a dozen different degrees, a dozen faculties, several dozen disciplines, etc. If all variables were independent, it would be possible to have 40,000,000,000 faculty members at a large university, each unique. In order to eliminate some of the variables, it is best to reduce the data set. In this way one can analyse a set almost as large but with much less difficulty. The following results were obtained by using only a few variables after the data base was reduced. Medicine and Dentistry were not included. Only faculty with doctorates were included. In addition, the analysis was focused on similar career paths by eliminating all faculty who were appointed later than their thirty-fifth year of age and by eliminating all faculty who did not finish their doctorates within two years after their university appointments. The following results were obtained.

Why some disciplines are higher paid than others is beyond the scope of this article. Why so few women study Physics is beyond the scope of this article (although the author would like to know the answer). These problems are unlikely the result of the Academic world alone; society and the media discourages women from entering some disciplines.

\* Dr. Balzarini is the former Chair of the Salaries Committee of the Salaries Committee of the CAUT Coop.

The reason for choosing the weighting function as the average of the two times in question is that this insures better consistency when comparing the calculation obtained from two widely separated years with the calculation obtained compounding yearly EMSIs between the two end years. We have combined all disciplines and degrees in calculating the Effective Mean Scale Increase in this article. It is possible to construct the Effective Mean Scale Increase with separate components. The results show that the gap between the academic profession and the rest of

**DEPARTMENT OF COMMUNICATION, SIMON FRASER UNIVERSITY**  
(Burnaby, B.C., V5A 1S6) is seeking applicants for two positions beginning in September, 1989: (1) Assistant Professor; and (2) Visiting Limited-Term Appointment (telecommunications, communication law, new information technologies). Applicants must have a Ph.D. in a related discipline plus evidence of a well developed research interest in the Department's areas of concentration: media, technology, and policy. Among the needs identified in conjunction with these positions are: news analysis, political communication, communication policy, advertising, telecommunications, media content analysis, and new information technologies. The Department has a large undergraduate program and also offers M.A. and Ph.D. degrees. Preference will be given to candidates who are eligible for employment in Canada at the time of application. Applications must be accompanied by a curriculum vitae and the names and addresses of three references, and must be received by the Department Chair, Prof. Liora Salaver, by 1 May 1989. These positions are subject to final budgetary approval.

### LEADING CONSTITUTIONAL DECISIONS OF THE SUPREME COURT OF CANADA

Edited versions of Supreme Court of Canada decisions on the Charter of Rights and other constitutional issues are available for course use or individual subscriptions.

These include:

- Abortion..... Morgentaler v. The Queen
- Language Rights..... Quebec Protestant School Board
- Separation of Powers/Foreign Policy..... Re Manitoba Lang. Rights
- Exclusion of Evidence..... Quebec Sign Laws (Pine/Quebec)
- Sunday Closing..... Operation Dismantle v. The Queen
- Separate School Funding..... Therns v. The Queen
- Federalism/National Dimensions/Outline..... R. v. Big M Drug Mart Ltd.
- ..... Edwards Books and Art Ltd.
- ..... Ref. Re Bill 30
- ..... Crown Zellerbach v. The Queen

For a free sample and more information on more than 50 decisions, write or call Ann Griffiths, Managing Editor, Leading Decisions at (403) 229-3869, Research Unit for Socio-Legal Studies, Faculty of Social Sciences S756, The University of Calgary, Calgary, Alberta T2N 1N4.

## Executive Director

### Centre for Constitutional Studies

The Centre for Constitutional Studies, at the Faculty of Law at the University of Alberta requires an Executive Director who will be responsible for the day to day operation of the Centre. Among the duties of the Executive Director are the following:

1. Maintenance of the Administrative Office of the Centre;
2. Supervision and co-ordination of employees of the Centre;
3. Supervision of accounts and preparation of funding proposals;
4. Supervision and management of the Charter of Rights Data Base;
5. Editor of the Centre newsletter;
6. Liaison with the University community, other research institutes and the community at large;
7. Administration of the Public Lecture Series;
8. Co-ordinator of conference preparation and organization;
9. Co-ordination of the publishing activities of the Centre;
10. Co-ordination of public relations for the Centre;
11. Co-ordination and logistical support for Visiting Scholars;
12. Other duties as assigned by the Board.

Applicants for this position should have an LL.B. or graduate training in the social sciences or humanities and must have demonstrated administrative capabilities. Fluency in both official languages is an asset.

**Term of Employment:** Salary Range:  
One year with the opportunity \$35,000 - \$40,000  
for renewal

**Deadline:** Application must be received no later than April 30th, 1989.

**Apply to:**

A. Anne McLellan, Chair, Management Board,  
Room 453, Law Centre, University of Alberta,  
Edmonton, Alberta Canada T6G 2H5  
Telephone: (403) 492-4445 FAX: (403) 492-4924

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University of Alberta  
Edmonton



University of Alberta  
Edmonton

## Home Economics Position

### Kenyatta University/ University of Alberta

**Position:** Replacement faculty for Department of Home Economics.

**Location:** Kenyatta University, Nairobi, Kenya.

**Responsibilities:** Teaching undergraduate courses in home economics. Preferred areas in rank order: Family Studies including child development, introductory Foods and Nutrition, Clothing and Textiles. Initiation of research projects related to area(s) of teaching.

**Qualifications:** Master's degree required, Ph.D. preferred. Previous experience in developing country an asset.

**Appointment and Salary:** Assistant Professor  
Salary Range \$33,144.00 - \$37,267.00 dependent upon qualifications.

Housing is provided by Kenyatta University.

**Application Deadline:** May 31, 1989.

**Beginning Date:** September 1, 1989 for one year with possible two year extension.

**General Information:** The University of Alberta and Kenyatta University have entered into a CIDA/ICDS funded project designed to strengthen the Department of Home Economics at Kenyatta University. Kenyatta University is located about 25 kilometers from Nairobi, Kenya. A three year degree focusing on educational roles is offered by the Department of Home Economics. There are fifteen faculty members with three currently on educational leave.

**Application Procedures:** Send letter of application, current resume and the names, addresses and phone numbers of referees to:

Dean E. Murray, Project Director  
Faculty of Home Economics  
115 Home Economics Building  
University of Alberta  
Edmonton, Alberta T6G 2M8

The University of Alberta is committed to the principle of equity in employment.



### QUEEN'S UNIVERSITY AT KINGSTON INDUSTRIAL RESEARCH CHAIR IN MANAGEMENT AND TECHNOLOGY

Applications are invited for the ALCAN/NSERC Industrial Research Chair in Management and Technology established under the Industrial Research Chair Program of the Natural Sciences and Engineering Research Council with support from Alcan International Ltd.

The position will be a tenure-track appointment at a senior level in the Faculty of Applied Science with a cross appointment in the School of Business. The Chair is intended to focus activities in the broad area of technological change, innovation and the management of technology in a competitive environment.

The Professor is expected to provide leadership in research in Management and Technology, to work with faculty and students in the Faculty of Applied Science and in the School of Business, and to broaden and strengthen linkages between Queen's University and the external technological community through his or her involvement in research and teaching.

Preference will be given to candidates having a background in engineering, and substantial full-time management experience in research-based industry. The appointment is conditional upon final approval by NSE/RC.

In accordance with Canadian Immigration requirements this advertisement is directed to Canadian citizens and permanent residents. Men and women are equally encouraged to apply.

Applications which should include a curriculum vitae and the names of three referees should be submitted by May 1, 1989, to:



Dr. Wm. McLachle  
Chairman of the Selection Committee  
Industrial Research Chair in  
Management and Technology  
Richardson Hall  
Queen's University  
Kingston, Ontario K7L 3N6

### PROGRAM COORDINATOR Distance Education

The Division of University Extension and Community Relations requires a Program Coordinator to provide consultative service to the University community in the planning, development and evaluation of Distance Education courses and programs. The Program Coordinator provides instructional design consultation to project teams, organizes and coordinates course production, assumes administrative responsibilities at the request of the Manager, Distance Education Services; contributes to the field of distance education through presentations and scholarship.

**QUALIFICATIONS:** Master's degree in adult or distance education plus three to five years of related experience which includes program development/evaluation, production of instructional materials in print, audio or video, and using audio or video conferencing for instruction; or an equivalent combination of education, training and experience.

**SALARY:** \$31,807 to \$38,554 per annum (\$44,337 Ceiling). This is a continuing position, subject to the availability of funding.

Candidates should submit a letter of application outlining their particular interests and qualifications relating to this position before May 1, 1989 to: Personnel Services, University of Victoria, P.O. Box 1700, Victoria, B.C. V8W 2Y2.

The University of Victoria offers equal employment opportunities to qualified male and female applicants.



### UNIVERSITY of GUELPH

#### DEAN, ONTARIO AGRICULTURAL COLLEGE

The University of Guelph invites applications and nominations for the position of Dean of the Ontario Agricultural College. The appointment will commence on July 1, 1990.

The University of Guelph has a special responsibility within the Ontario University system to serve agriculture in the broadest sense. The University is committed to a leadership position in education, research and extension related to the use of the components of the agriculture and food system, whether these be physical, financial or human. We have a major concern regarding the impact of resource use on our environment and on society in general.

One of seven Colleges in the University, the Ontario Agricultural College offers a wide range of undergraduate, graduate and research programs in support of agriculture and has a major commitment to international activities. The College has approximately 180 faculty members in nine academic departments: Agricultural Economics and Business, Animal and Poultry Science, Crop Science, Environmental Biology, Food Science, Horticultural Science, Land Resource Science, Rural Extension Studies, and Landscape Architecture. The College currently enrolls approximately 1300 students in its undergraduate and diploma programs and 400 students in its M.Sc., M.Agr., M.L.A. and Ph.D. graduate programs. The total annual research budget is in excess of \$22 million.

Applicants should have a proven record of leadership and achievement in education and research and a broad understanding of agriculture as it relates to universities, industry, government and society at large. The appointment as Dean will be for a five year term renewable for an additional five years, and will include a tenured faculty appointment in an appropriate department. Applications and nominations should be submitted by May 15, 1989 to Dr. J.R. MacDonald, Vice-President, Academic, University of Guelph, Guelph, Ontario, N1G 2W1.

In accordance with Canada Immigration requirements, this advertisement is directed to Canadian citizens and permanent residents.

The University of Guelph is committed to Employment Equity

### McGill Dean of the Faculty of Arts

Nominations and applications are invited for the position of Dean of the Faculty of Arts of McGill University. The appointment, effective September 1, 1989, is normally for a five-year term and may be renewed.

The Dean of Arts is responsible to the Vice-Principal (Academic) for the supervision and administration of the academic programs, budgets, and all activities of the Faculty. Candidates should have appropriate scholarly and administrative experience; facility in both English and French is desirable.

In accordance with Canadian immigration requirements, this advertisement is directed in the first instance to Canadian citizens and permanent residents.

Nominations and applications will be most useful if accompanied by a detailed curriculum vitae and the names of three referees, and should be submitted to:

Dr. S.O. Freedman  
Vice-Principal (Academic)  
McGill University  
845 Sherbrooke Street West  
Montreal, Quebec  
H3A 2T5

#### UNIVERSITÉ D'OTTAWA Criminologie

Le Département de criminologie recherche les services d'un-e professeur-e pour le 1er juillet 1989. Ce poste est relié à un plan de renouvellement du corps professoral et est ouvert aux candidats de langue anglaise ou française. Les candidats doivent avoir une formation universitaire en criminologie ou en droit. Ils ou elles doivent également enseigner en français des leur embauche, et être en mesure de faire de la recherche dans cette langue. Nous encourageons les femmes qui satisfont à ces exigences à poser leur candidature. Les domaines de spécialisation sont ouverts, mais une attention particulière sera accordée aux candidats ayant démontré une capacité de recherche sur la question de la femme. Le bilinguisme actif est une exigence pour la permanence à l'Université d'Ottawa. Le traitement collectif en vigueur. Qualification minimale: scolarité de doctorat en criminologie complétée (ou dans une discipline connexe). Concomitamment aux stipulations de la Loi canadienne sur l'immigration, ce poste est offert aux citoyens nés en ou aux résidents nés permanent-e-s du Canada. Prière de faire parvenir la demande d'emploi, le curriculum vitae ainsi que le nom de trois personnes à des fins de références avant le 30 avril 1989 à l'attention de: Professeur J. Laplante, Président du Comité de recrutement, Département de criminologie, Université d'Ottawa, Ottawa, Ontario, K1N 6N5.

#### UNIVERSITY OF OTTAWA Criminology

The Department of Criminology invites applications for a full-time position beginning July 1st, 1989. This is a Faculty Renewal Plan position, at the rank of Lecturer or beginning Assistant Professor, leading to a regular tenure-track appointment within five years. Candidates must have a background that is directly relevant to criminology. They should be able to teach in French, and to undertake research in French, as of the time of the appointment. Qualified female candidates who meet these criteria are encouraged to apply. The field of specialization is open, but special attention will be given to candidates with a research interest in the topic of women. Active bilingualism is a requirement for tenure. Salary is competitive, and determined according to the Collective Agreement. Minimum qualifications: Doctorate in Criminology or in a related discipline, completed or near completion. In keeping with Canada Immigration regulations, the position is offered to Canadian citizens and permanent residents. Applications, with curriculum vitae and the names of three referees, should be sent before April 30, 1989, to: Professor J. Laplante, Chair, Search Committee, Department of Criminology, University of Ottawa, Ottawa, Ontario, K1N 6N5.

#### Department of English Tenure and Sessional positions

Applications are invited for two positions: 1) A probationary, tenure-track appointment at the Assistant or Associate rank in Composition/Rhetoric. Required: Ph.D. in Composition/Rhetoric; prior degree in literature; experience in teaching writing; established research and publication record in the field; familiarity with process theory; departmental administrative experience or potential; familiarity with Writing Across the Curriculum. Duties: a) to coordinate the English Department's Writing Programme; b) to help develop a Composition/Literature degree stream; c) to teach introductory, intermediate, and senior undergraduate courses in composition and rhetoric; d) to serve on the university's Writing Across the Curriculum Programme Coordinating Team. Load: 2/3 teaching (2 courses); 1/3 administration. 2) A 12-month sessional appointment at the Assistant rank, to teach Eighteenth and Nineteenth Century American Literature, Law in Literature, and Introductory Literature or Composition. Ph.D. essential; teaching experience and publication record desirable. French/English bilingualism an asset. Laurentian University encourages women to apply. In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents. Closing date for both positions, May 15, 1989. Both positions commence July 1, 1989.

Please send C.V., transcripts, and have three referees write directly to: Dr. Jon Gorder, Dean of Humanities.

Laurentian University Université  
Laurentienne

Sudbury Ontario Canada P3E 2C6. (705) 675-1151

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## The University of Waterloo invites applications and nominations for the position of Dean of the Faculty of Engineering

Candidates are sought for the position of Dean of the Faculty of Engineering. The appointment will commence on July 1, 1990, or as soon as possible thereafter, for a five-year term. The University's senior Faculty, Engineering pioneered co-operative education in Canada when it enrolled its first students in July, 1957. All undergraduate programs are on the co-operative system, in five departments: Chemical, Civil, Electrical, Mechanical and Systems Design. A program in Geological Engineering shares resources between Civil Engineering and Earth Sciences in the Faculty of Science. All disciplines offer Graduate programs leading to both the MSc and PhD degrees. The Department of Management Sciences offers graduate programs and degrees in Management Sciences. There are currently 165 full-time faculty members, more than 2,500 undergraduate students and 1,400 graduate students; total University enrolment is approximately 24,000. The Faculty has a distinguished record in research.

Candidates should have a proven record of scholarship, teaching and administration. Applications and nominations should be submitted by June 12, 1989, but the Committee's preference would be to receive applications and nominations as early as possible. Where possible, applications and nominations should be accompanied by detailed curricula vitae and the names of three referees, will be treated in confidence, and should be directed to:

Ms. R. Atwater-Hallatt  
Assistant University Secretary  
University Secretariat  
University of Waterloo  
Waterloo, Ontario  
N2L 3G1

In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents. Applications from women candidates are particularly welcome. An Employment Equity Employer.

### St. Francis Xavier University Physics

The Physics Department of St. Francis Xavier University invites applications for a one year limited term (sabbatical replacement) position at the assistant professor level commencing Sept. 1, 1989. The salary for this rank in 1988-89 is \$31,852. The successful applicant should hold a Ph.D. degree. Duties will include undergraduate teaching and research. The possibility of membership of the department would be desirable but is not a requirement. Areas of research activity in the department include: atomic and molecular physics, condensed matter physics, biophysics, and statistical physics. Applicants are asked to have three referees send letters directly to the address below. Applications should be submitted by May 15, 1989 to Dr. D.L. Hunter, Chair, Physics Dept., St. Francis Xavier University, Antigonish, Nova Scotia, B2G 1C0. In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents.



### DEVELOPMENTAL PEDIATRICIAN / CHILD NEUROLOGIST / PEDIATRIC PHYSIATRIST

Wascana Rehabilitation Centre has a staff position available to provide leadership in the field of Developmental Pediatrics/Child Neurology/Pediatric Psychiatry on multidisciplinary assessment and management teams.

The Centre is a progressive clinical facility with 269 inpatient beds and an active out-patient program which is currently undergoing a \$60 million re-development.

The position supports patient families as well as community and centre-based programs providing medically related services to preschool and school aged children with development disabilities.

Salaries or fee-for-service arrangements are available, including relocation assistance. Salaried personnel will be eligible to participate in employee benefit plans including retirement, life insurance, dental, sick leave, and disability.

For further information, please direct your inquiries or send a curriculum vitae to:

Raymond C. Tervo, M.D.  
Children's Rehabilitation Program  
Wascana Rehabilitation Centre  
2160 - 23rd Avenue  
REGINA, Saskatchewan S4S 0A5  
Telephone (306) 359-5404

### ASSISTANT / ASSOCIATE PROFESSOR OF ANIMAL SCIENCE (TWO POSITIONS)

The Nova Scotia Agricultural College, Truro, Nova Scotia, invites applications for two faculty positions in the Animal Science Department. The College, with 500-600 students, has served Atlantic Canada since 1905. The complete four years of the B.Sc. (Agr.) program began in 1980. Primary responsibilities of the Animal Science Department are teaching (in technical programs in animal science and animal health and degree programs in animal science and pre-veterinary medicine) and research. Eleven faculty are well served by a new Animal Science Building, a laboratory animal facility and the College farm.

#### ANIMAL PHYSIOLOGIST / ENDOCRINOLOGIST

##### Duties:

The incumbent will teach general and applied physiology and fur animal production at the technical and undergraduate levels and conduct research in animal physiology / endocrinology as applied to agricultural species.

##### Qualifications:

A Ph.D. degree or equivalent in animal physiology or endocrinology as applied to agricultural species. A genuine interest in fur animal production, combined with either relevant experience or a willingness to develop expertise in this field is essential. Candidates with a Master's degree and exceptionally strong experience may be considered.

Salary Range: Commensurate with qualifications and experience.

Please quote competition Number: 89-9137

#### ANIMAL GENETICIST

##### Duties:

The incumbent will teach animal genetics and sheep production at the technical and undergraduate levels and conduct research in animal genetics as applied to agricultural species.

##### Qualifications:

A Ph.D. degree or equivalent in animal genetics as applied to agricultural species. A genuine interest in sheep production, combined with either relevant experience or a willingness to develop expertise in this field is essential. Candidates with a Master's degree and exceptional strong experience may be considered.

Salary Range: Commensurate with qualifications and experience.

Please Quote Competition Number: 89-9138

In accordance with Canadian Immigration requirements, these advertisements are directed to citizens and permanent residents of Canada.

Closing Date: April 28, 1989

##### Full Civil Service benefits.

The Province of Nova Scotia is an equal opportunity employer.

Applications and/or resumes should be submitted to the Nova Scotia Civil Service Commission, P.O. Box 943, Halifax, Nova Scotia, B3J 2V9

Applicants are encouraged to send copies of three publications representing scientific achievement to the above address.



Department of  
Agriculture and Marketing

### St. Francis Xavier University Food Science Food Service Management

The Department of Nutrition and Consumer Studies of St. Francis Xavier University invites applications for a tenure track position in food science/food service management. A preferred candidate will have a Ph.D., but candidates with Master's degrees will be considered. Responsibilities include teaching undergraduate courses in food science and food service management, and maintaining an active food research program. The appointment will be effective Sept. 1, 1989. Level of appointment and salary will be commensurate with qualifications. In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents. Applicants should send a curriculum vitae, transcripts, and the names and addresses of three referees to: Dr. H. Aboud, Chair, Department of Nutrition and Consumer Studies, P.O. Box 193, St. Francis Xavier University, Antigonish, N.S., B2G 1C0.

### St. Francis Xavier University Biologist

Limited-term appointment, sabbatical replacement. Duties include teaching a course in Introductory Biology, and one half course from Population Ecology, Invertebrate Zoology, or Comparative Vertebrate Anatomy. In accordance with Canadian immigration regulations, this advertisement is directed to Canadian citizens or permanent residents. Submit curriculum vitae, names, addresses, and telephone numbers of three referees by June 15, 1989 to: Dr. G.E. Newsome, Chair, Selection Committee, Department of Biology, St. Francis Xavier University, Antigonish, Nova Scotia, Canada, B2G 1C0, Telephone (902) 867-2274.

## DEPARTMENT OF FRENCH

Applications are invited for 2 possible tenure track appointments at the rank of Assistant Professor in the Department of French on the Fredericton Campus of the University of New Brunswick. Candidates must hold a doctorate, have native or near-native command of French with some experience in university teaching, and will be expected to teach primarily language improvement courses at the undergraduate level, with the possibility of teaching in at least one of: French Canadian Literature, Translation, Comparative Structure, Lexicology and Syntax. Salary commensurate with qualifications and experience (1989-90 floor \$31,721). Send letter of application, including full curriculum vitae and names of three referees, to:

Dr. D.F.G. McInyre, Chairman  
Department of French  
University of New Brunswick  
P.O. Box 4400  
Fredericton, NB  
E3B 5A3

These appointments are subject to budgetary approval, and will take effect on or after 1 July, 1989, with closing date for competition declared when positions are filled. In accordance with Canadian Immigration requirements, this advertisement is directed to Canadian citizens and permanent residents.



### UNIVERSITY OF NEW BRUNSWICK

## WESTMINSTER INSTITUTE FOR ETHICS AND HUMAN VALUES

### SENIOR RESEARCH ASSOCIATE - ASSISTANT DIRECTOR

A Senior Research Associate (Applied Ethics) - Assistant Director appointment will be made at Westminster Institute for Ethics and Human Values, London (Ontario), effective July 1, 1989. Qualifications: Ph.D. in Philosophy (publications, demonstrated research and teaching ability, ten years' experience desirable); administrative experience (three years). Responsibilities include: (1) scholarly productivity and creative research (project initiation, writing grant proposals, conduct of proposed inquiry, management of grants), teaching in the Philosophy Department or the Health Sciences Faculties of the University of Western Ontario (one course maximum), participation in professional programs, limited activity in consultation, personal research, public information and public education. (2) certain shared administrative duties. Three year contract, renewable, one month vacation annually; pension, health and life insurance benefit package; salary commensurate with qualifications and experience, presuming budgetary approval. Jointly established in 1979 by Westminster College and The University of Western Ontario, the Institute engages in interdisciplinary research and public education concerning ethical, social, legal, theological and philosophical dimensions of human life and institutions. During the past five years the Institute's research has focussed on bioethics, values and the law, business and professional ethics, environmental ethics and ethical aspects of population. Closing date for applications: April 30, 1989. Send letter of application together with Curriculum Vitae and the names of three referees to: Dr. Abbyann Lynch, Director, Westminster Institute for Ethics and Human Values, 361 Windermere Road, London, Ontario Canada, N6G 2K3.

In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents of Canada.

"AN EQUAL OPPORTUNITY EMPLOYER"





## McGill Vice Principal (Planning)

The University invites nominations and applications for the position of Vice-Principal (Planning). The appointment, effective August 1, 1989, is normally a five-year term and may be renewed. Men and women will be equally considered.

Reporting to the Principal, the Vice-Principal (Planning) will be responsible for institutional planning and research, relations with government departments and administrative bodies, and with other universities; and computer services including the Computing Centre, microcomputer support, data networks, and the telephone and data communications system. Candidates should have appropriate scholarly and administrative experience. Facility in both English and French is desirable.

In accordance with Canadian Immigration requirements, this advertisement is directed to Canadian citizens and permanent residents.

Nominations and applications, accompanied by a curriculum vitae and the names of three referees, if possible, should be submitted by April 30, 1989, to:

David L. Johnston  
Principal and Vice-Chancellor  
McGill University  
845 Sherbrooke Street West  
Montreal, PQ H3A 2T5



## McGill Vice-Principal(e) (Planification)

L'université est à la recherche de candidat(e)s pour le poste de vice-principal(e) (planification), à compter du 1<sup>er</sup> août 1989 dans le cadre d'un mandat de cinq ans, renouvelable. Cette annonce s'adresse indifféremment aux hommes et aux femmes.

Le (la) vice-principal(e) (planification) relève du principal et s'occupe de la planification et de la recherche institutionnelles, des relations avec les ministères, les organismes administratifs et les autres universités, des services informatiques dont le centre de calcul, de l'infrastructure microinformatique, des réseaux de données et des systèmes téléphoniques et de transmission de données. Les candidat(e)s doivent posséder une solide expérience administrative et universitaire et s'exprimer avec aisance en anglais comme en français.

Conformément à la législation canadienne en matière d'immigration, cette offre d'emploi s'adresse au premier chef aux citoyen(ne)s canadien(ne)s et aux résident(e)s permanent(e)s.

Faire parvenir les candidatures, accompagnées d'un curriculum vitae et du nom de trois répondant(e)s, si possible, avant le 30 avril 1989 à:

Monsieur David L. Johnston  
Principal et vice-chancelier  
Université McGill  
845, rue Sherbrooke ouest  
Montréal (Québec) H3A 2T5



## Hong Kong Polytechnic

Director: Professor John L. Clerk

### HEADSHIPS DEPARTMENT OF BUILDING SERVICES ENGINEERING DEPARTMENT OF MATHEMATICAL STUDIES

with the possible title of  
PROFESSOR

The Hong Kong Polytechnic was established in 1972. With a student population in excess of 25,000 and a full-time academic staff establishment of close to 1,000, it is the largest of the higher education institutions in Hong Kong, and offers advanced courses spanning a range of awards (up to and including post graduate level) and modes of attendance. Although now close to its planned capacity, it continues to take a dynamic and vigorous approach to its further development, including research, consultancy, technology transfer, and partnership with industry, commerce and government.

The department of Building Services Engineering offers a sandwich B. Eng (Hons) degree and a Higher Diploma in Building Services Engineering. Higher Certificate courses and Endorsement Units are also offered on a part-time day-release or evening basis.

The Department of Mathematical Studies offers both full-time and part-time programmes with major studies in the mathematical disciplines. These include a Higher Diploma in Mathematics, Statistics and Computing, an Associateship in Applied Statistics and a Higher Certificate in Mathematical Studies. The Department also collaborates with the Departments of Applied Physics and of Applied Biology and Chemical Technology in offering a mixed-mode B.Sc.(Hons) degree course in Combined Studies in Mathematics and Science. In addition, it also provides service teaching to students in other disciplines.

#### QUALIFICATIONS FOR APPOINTMENT:

Candidates should have appropriate academic and/or professional qualifications, together with successful and relevant experience in, for example, tertiary education, industry, the public sector, advanced teaching, research or consultancy. The successful candidates will also be required to demonstrate the personal qualities necessary to lead the department in its diverse functions.

#### PROFESSORSHIP:

Consideration will be given to the award of the title of Professor to a suitably qualified appointee. It would also be the intention to confer the title upon an appointee currently holding the title.

#### SALARY AND CONDITIONS OF SERVICE:

Not less than HK\$433,800 p.a. + 25% gratuity (CAN\$1=HK\$6.52 on 11.3.89)

The initial appointment will be made on a fixed term contract of four years at the end of which a gratuity equal to 25% of salary earned over the whole contract period will be payable. Subject to mutual agreement, a further appointment may be offered at the end of the initial contract period, either on the basis of a further gratuity bearing fixed term contract or on superannuable terms. Other benefits include subsidised housing, leave, passages, medical and dental benefits, and children's education allowance.

#### APPLICATIONS:

Applications including curriculum vitae and names of three referees should be sent to the General Secretary, Hong Kong Polytechnic, Hung Hom, Kowloon, Hong Kong before 30 April 1989 (Fax: 852 3 7643374). Further information available from same office.

**T**he Hospital for Sick Children, a fully accredited, 650-bed paediatric teaching hospital, affiliated with the University of Toronto, seeks a

## Pathologist-in-Chief

This is a joint appointment with the Department of Pathology, University of Toronto.

The hospital department has a well-equipped laboratory with facilities for electron microscopy, immunohistochemistry, cytology and histology as well as a medical staff of seven. Applicants should be paediatric pathologists with an established research program, excellent teaching skills and appropriate administrative experience.

Candidates must have a FRPC or equivalent and be eligible for licensure in the Province of Ontario. In accordance with Canadian Immigration requirements, this announcement is directed to Canadian citizens and permanent residents. Potential candidates should submit their curriculum vitae by May 30, with the names of 4 referees, quoting file # D021D, to: Mary Babyn, Pathology Committee, The Hospital for Sick Children, 555 University Avenue, Toronto, Ontario M5G 1X8



THE HOSPITAL  
FOR SICK CHILDREN

## DEAN SIFIC

Saskatchewan Indian Federated College  
University of Regina

SIFIC invites nominations and applications for the position of Dean of Academic Affairs - Regina campus.

SIFIC is the only Indian controlled University College in the Americas and is committed to excellence in research and teaching. At present SIFIC has faculties of Arts, Science, Business and Public Administration, Social Work and Education, and is expanding at a fast rate to meet increased student demand.

The new Dean will provide academic leadership for Faculty and Department Heads and continue to develop SIFIC at the local, national and international levels in the university community.

The successful candidate will have academic and administrative experience in research and teaching and a sensitivity to Indian culture and issues.

The position will commence on July 1, 1989 or at a mutually agreed upon time.

Nominations and applications with a current resume and the names of three referees, should be forwarded by April 30, 1989 to:



Paul J. Dodgeon  
Vice President of Academic Affairs  
Saskatchewan Indian Federated College  
University of Regina  
Regina, Saskatchewan S4S 0A2

## QUEEN'S UNIVERSITY DEPARTMENT OF BIOLOGY

The Department of Biology at Queen's University invites applications for a tenure-track position in the area of Animal Physiology. Preference will be given to vertebrate physiologists whose research work involves physiological approaches to environmental or ecological questions, but researchers in all areas are encouraged to apply. Qualifications: The successful candidate should be an enthusiastic and competent teacher and will be expected to develop a vigorous research program. Qualifications include a Ph.D. degree and published evidence of excellent research ability. Expected Date of Appointment: This appointment can be effective July 1, 1989 for as negotiated and is expected to be at the rank of Assistant Professor with salary commensurate with qualifications. Application Deadline: The application deadline is May 15, 1989 or until a suitable candidate is selected. Applications should include a curriculum vitae and a statement of future research interests. Arrangements should also be made to have three letters of reference sent to: Dr. D.T. Dennis, Head, Department of Biology, Queen's University, Kingston, Ontario, Canada, K7L 3N6. (In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents. Candidates of either sex are equally encouraged to apply. Queen's University is willing to help the spouse of a new appointee to seek employment.)





**THE UNIVERSITY OF MANITOBA LIBRARIES  
HEAD, ELIZABETH DAFOE LIBRARY**

The incumbent is responsible to the Director of Libraries for the overall operation of the Elizabeth Dafoe Library in all its aspects. This includes: personnel related duties; policy formulation and implementation; understanding the research and teaching programs of the Faculties of Arts and Human Ecology and the Schools of Nursing and Social Work, planning the collections and services of the unit to reflect those needs; presenting a confidential budget to Libraries Administration and monitoring expenditures; collection development; developing and providing library services; contributing to the planning of physical facilities; participating in the development of major library policy recommendations; undertaking specific projects and serving on library and university committees as appropriate.

**QUALIFICATIONS:** A degree from an ALA accredited library school. A subject degree in Arts, Human Ecology, Nursing or Social Work, preferably at the graduate level, and/or significant experience at the professional level in a large research or academic library. Demonstrated management skills. Knowledge of academic library public services, automated systems and collection development are required. Personal qualifications of judgement, initiative and resourcefulness; the proven ability to work with staff and users at all levels. The successful candidate is expected to show evidence of participation in professional development and other relevant professional activities.

**RANKS & SALARY RANGES:** Commensurate with qualifications and experience:

Assistant Librarian	\$29,031 to \$50,508
Associate Librarian	\$36,459 to \$63,432

In addition, the Unit Head position carries a stipend of \$2,768 per annum.

This position has a two-year probationary period.

**EFFECTIVE DATE:** April 1, 1989

Librarians enjoy academic status and are appointed to one of four ranks: General, Assistant, Associate and Librarian, with the possibility of promotion.

Both women and men are encouraged to apply. In accordance with Canadian Immigration regulations, this announcement is directed to Canadian citizens and permanent residents.

Submit application, including resume, salary expectations and the names of three referees by April 30, 1989 to:

Erlie C. Ferguson  
Director of Libraries  
University of Manitoba  
Winnipeg, Manitoba,  
R3T 2N2



**THE UNIVERSITY OF MANITOBA LIBRARIES  
HEAD, SERIALS SECTION  
TECHNICAL SERVICES**

The Head, Serials Section reports to the Coordinator of Technical Services. Duties of the position include: coordinating, planning and supervising staff and workflow; liaising with the Heads of the Acquisitions and Cataloguing Departments; initiating, participating in and notifying other areas of policies and procedures; coordinating and evaluating serials acquisitions procedures; training new serials cataloguers; serving as a resource for serials cataloguing and reference; assisting with serials cataloguing as needed; maintaining statistics of work performed and writing an annual report; keeping current with developments in serials librarianship.

**QUALIFICATIONS:** An ALA accredited library degree. Significant professional experience with all aspects of serials librarianship at an academic or research library. Demonstrated management skills. Knowledge of academic library public services, technical services activities, and automated systems required; knowledge of collection development an asset. Personal qualifications of judgement, initiative and resourcefulness; the proven ability to work with staff and users at all levels. The successful candidate is expected to show evidence of participation in professional development and other relevant professional activities.

**SALARY RANGES AND RANGES:** Commensurate with qualifications and experience:

Assistant Librarian	\$29,031 to \$50,508
Associate Librarian	\$36,459 to \$63,432

In addition, this Section Head position carries a stipend of \$914 per annum.

This position has a two-year probationary period.

**EFFECTIVE DATE:** As soon as possible

Librarians enjoy academic status and are appointed to one of four ranks: General, Assistant, Associate and Librarian, with the possibility of promotion.

Both women and men are encouraged to apply. In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents.

Submit applications including resume, salary expectations and the names of three referees by April 30, 1989 to:

Erlie C. Ferguson  
Director of Libraries  
The University of Manitoba  
Winnipeg, Manitoba,  
R3T 2N2



**FELLOWSHIP IN PSYCHOSOCIAL ONCOLOGY**

The Department of Psychosocial Resources of the Tom Baker Cancer Centre will be offering a one-year (possibility of two years) fellowship commencing September 1989. The department has a staff of four psychologists, three social workers and two consulting psychiatrists. The Tom Baker Cancer Centre is the principal tertiary care facility serving cancer patients and their families for the Southern Alberta Region and is a teaching facility of the University of Calgary.

Candidates should possess a Ph.D. or be near completion of Doctoral studies in Clinical/Counselling Psychology and have Behavioral Medicine Research Interests. Fellows will have training opportunities in Adult, Pediatric and Consultation Liaison Services. Stipend and benefit package included.

Send inquiries and curriculum vitae to:

Dr. Barry D. Bultz  
Department of Psychosocial Resources  
TOM BAKER CANCER CENTRE  
1331 - 29th Street N.W.  
Calgary, Alberta  
T2N 4N2

Preference will be given to non-smokers.

## Director, Learning Resources Centre

Ryerson, located in the heart of downtown Toronto, seeks a Director, Learning Resources Centre.

Reporting to the Vice-Presidential level, this is a senior administrative position responsible for the operation of a centre which includes highly automated library and media library services, archives, a general-use microcomputer facility, and full media centre services. The core functions of the library include the maintenance of a collection of required basic materials for the full range of undergraduate instruction, the provision of those services which assist student academic development, the resource support for upper-year studies and research in undergraduate programs.

Ryerson, a full member of the Council of Ontario Universities and the Association of Universities and Colleges of Canada, provides applied professional undergraduate degrees in 32 programs. Its Continuing Education Division offers over 45 certificate programs and more than 450 diploma, degree and professional upgrading courses on a part-time basis. Ryerson is the educational choice of 10,000 full-time and 30,000 part-time students.

The Director's background shall include: an accredited graduate degree, in library or information science, or an equivalent degree; extensive experience and knowledge of information systems and information technologies, new library technologies and media administration; proven managerial and leadership skills; and strong interpersonal and budgetary skills, all preferably obtained at a post-secondary institution.

Salary offered will be commensurate with the education and experience of the successful candidate.

In accordance with Canadian Immigration requirements, this advertisement is directed to Canadian citizens and permanent residents of Canada.

Qualified candidates are asked to send a resume, along with the names of three referees by April 30, 1989, indicating position title and reference #2655, to: Director, Human Resources, Ryerson Polytechnical Institute, 350 Victoria Street, Toronto, Ontario M5B 2K3

AN EMPLOYMENT EQUITY EMPLOYER

**RYERSON**



# Positions available / Postes vacants

## ACCOUNTING

**BROCK UNIVERSITY.** Applications are invited for a one year sabbatical replacement position in the Department of Accounting and Finance to teach third and fourth year finance courses in the 1989-90 academic year. A Ph.D. in business administration or a Ph.D. partially completed is required. In accordance with Canadian Immigration requirements, this advertisement is directed to Canadian citizens and permanent residents. Applicants should submit, in writing by May 31, 1989, a curriculum vitae, as named and addressed to the Vice President for Academic Affairs, Brock University, 1800 University Avenue, St. Catharines, Ontario, L2S 3A1. Brock University is an equal opportunity employer.

**UNIVERSITY OF WATERLOO.** Business Administration. Accounting. Applications are invited for faculty positions from those with teaching and research interests in (i) financial accounting, (ii) finance, (iii) information systems, (iv) auditing, (v) taxation. Ph.D. or equivalent. Salary will depend on qualifications. Appointments effective July 1, 1989 on a permanent basis. Appointments available until positions filled. Send resumes to: Dr. J.R. Hanna, Director, School of Accountancy, University of Waterloo, Waterloo, Ontario, N2L 3G1. In accordance with Canadian Immigration requirements, this advertisement is directed to Canadian citizens and permanent residents. The availability of these positions is subject to budgetary approval. It is the intention of the University of Waterloo to fill its vacancies with recent Ph.D. graduates appointed as Assistant Professors wherever possible. Applications from women candidates are particularly welcome. An Employment Equity Employer.

## ANTHROPOLOGY

**THE UNIVERSITY OF LETHBRIDGE.** Faculty of Arts and Science, Department of Anthropology. 1. Title Assistant Professor; Nine-month term appointment, leave replacement. 2. Qualifications. Ph.D. publications and teaching experience preferred. In

accordance with the Canadian Immigration Regulations, this advertisement is directed to Canadian citizens and permanent residents of Canada. The university aspires to hire individuals who have a demonstrated potential for excellence in teaching, research and scholarship. Women and men are encouraged to apply for this position. 3. Responsabilités. Le candidat(e) doit posséder une maîtrise en anthropologie ou en archéologie, ou une maîtrise en anthropologie ou en archéologie, ou une maîtrise en anthropologie ou en archéologie, ou une maîtrise en anthropologie ou en archéologie. 4. Salaires. Les salaires sont déterminés en fonction de l'expérience et de la formation. 5. Applications. Les candidats doivent soumettre un curriculum vitae, des évaluations, des échantillons de publications, et des références, et les soumettre à l'adresse suivante: Dr. A. Aycock, Chair, Department of Anthropology, University of Lethbridge, 4401 University Drive, Lethbridge, Alberta, T1K 3M4. 6. Effective Date: 1 August 1989. 7. Closing Date: 1 May 1989.

## ART EDUCATION

**CONCORDIA UNIVERSITY.** The Department of Art Education and Art Therapy of Concordia University has a full-time leave replacement position for 1989-1990, pending budgetary approval, at the level of Lecturer. The appointee will teach courses at the undergraduate and diploma levels, supervise student teachers, and act as liaison with school boards. Candidates should have an M.A. in Art Education. Experience teaching in the schools and at the university level is essential. Knowledge of the Quebec school system and the ability to communicate in French are assets. Salary will be commensurate with the individual's qualifications and experience. Letters of application must be accompanied by a complete curriculum vitae and the names of three people who would be prepared to serve as references. The closing date for applications is April 30, 1989. In accordance with Canadian Immigration requirements, this advertisement is directed to Canadian citizens and permanent residents. Please address all applications to: Search Committee,

Attention: David Pariser, Department of Art Education and Art Therapy, Concordia University, 1455 de Maisonneuve Blvd., Ouest, VA 209-1, Montreal, Quebec, H3G 1M6.

## BIOCHEMISTRY

**UNIVERSITY OF OTTAWA.** Département de Biochimie, Professeur(s) Adjoint(s) de Biochimie. Le Département de Biochimie est à la recherche de trois professeurs adjoints avec possibilité de permanence pour entrer en fonction le 1er septembre, 1989. La disponibilité des postes est soumise à l'approbation budgétaire. Un doctorat est de rigueur. Les candidat(e)s chois(e) doivent enseigner la biochimie en français et en anglais au niveau pré-diplôme. Ils (elles) auront l'opportunité d'entreprendre des programmes de recherche indépendante y compris la formation de candidats aux grades supérieurs. L'université a une politique d'égalité en matière d'emploi. Les citoyen(ne)s canadien(ne)s ou immigré(e)s reçus(e)s sont invités à poser leur candidature au docteurant au Dr. P. Anderson, Département de Biochimie, Université d'Ottawa, Ottawa, Ontario, Canada K1H 8M5.

**UNIVERSITY OF OTTAWA.** Department of Biochemistry. Applications are invited for three assistant professor positions, with the possibility of tenure. The positions are subject to budgetary approval. Ph.D. and evidence of research potential required. Candidates must be able to teach in English and French at the undergraduate level and be prepared to develop an independent research program including graduate student supervision. Employment equity is University policy. Canadian citizens and permanent residents of Canada are invited to apply to Dr. P. Anderson, Department of Biochemistry, University of Ottawa, Ottawa, Ontario, Canada K1H 8M5.

**UNIVERSITY OF ALBERTA.** Research Associate. An experienced scientist with a Ph.D. in Biochemistry or related field is sought to help run a laboratory comprising 10-12 technicians, post-doctoral fellows and graduate students. The laboratory is engaged in two areas of research: 1) An examination of lipid metabolism as a function of membrane composition in tissue cultured cells, and 2) The use of biological macromolecules as carriers of drugs and enzymes. The successful applicant will be expected to establish his/her own research program in addition to assuming other responsibilities within the laboratory. Salary will be commensurate with experience stating at a minimum of \$30,000. The position is for a minimum of 2 years, with possible renewal subject to the continued availability of funding, effective June 1989. Apply in writing with the names of three references to: Dr. Mark J. Poznanski, Associate Dean, Faculty of Medicine, University of Alberta, Edmonton, Alberta, Canada T6G 2R7 by April 30th. The University of Alberta is an equal opportunity employer, but in accordance with Canadian Immigration regulations this advertisement is directed to Canadian citizens and permanent residents.

**UNIVERSITY OF GUELPH.** Department of Chemistry and Biochemistry. Biochemistry Leave Replacement. The Department of Chemistry and Biochemistry is seeking an Assistant Professor of Biochemistry for the period September 1, 1989 to August 31, 1990. The appointment is extendable to a

second year by mutual agreement. This position is a leave replacement and is not tenure track. Duties will include teaching four courses in biochemistry and possibly related areas, according to the interests of the incumbent. Opportunities will be available for research, either independently or in collaboration with one of the research groups in the department. All applicants should possess, or expect to earn, a Ph.D. degree by the starting date. Please apply to: Bryan R. Henry, Professor of Chemistry and Chair, Department of Chemistry and Biochemistry, University of Guelph, Guelph, Ontario, N1G 2W1. The following should be included with all applications: complete bibliographical data with publication list, names and addresses of three professional referees, copies of university transcripts, and statement of teaching or industrial experience. In accordance with advertisement is directed to Canadian citizens and permanent residents. The University of Guelph is committed to Employment Equity. Subject to final budgetary approval.

## BIOLOGICAL SCIENCES

**UNIVERSITY OF WINDSOR.** The Department of Biological Sciences invites applications for a tenure-track position at the Assistant Professor level. The successful candidate will have a Ph.D. with a research program in development physiology or developmental genetics and will be expected to obtain external research funding. Preference will be given to an individual working on aquatic organisms. Duties will include: participating in the teaching of undergraduate animal physiology courses, and graduate courses in area of specialization; and the directing of graduate students at M.Sc. and Ph.D. levels. The position is available July 1, 1989. Later start date may be negotiated. Please send application by April 30, 1989 to: Dr. M.L. Paves, Department of Biological Sciences, University of Windsor, Windsor, Ontario, Canada, N9B 3P4. The University of Windsor offers equal opportunity to all individuals of equal talent and ability. Women are particularly encouraged to apply. In accordance with Canadian Immigration regulations, this advertisement is directed to Canadian citizens and permanent residents.

## BIOLOGY

**McGILL UNIVERSITY.** Molecular/Cellular Biology. A fully funded postdoctoral research position is immediately available for a molecular/cellular biologist. The research includes the development and characterization of cell lines expressing cells. Individuals with experience in cellular cytotoxicity assays are particularly encouraged to apply. Please submit resume with references to: Giny Matlaszewski, Professor of Pathology, McGill University, Macdonald College, 211 Lakeshore Road, Ste Anne de Bellevue, Quebec, Canada H9X 1C0.

**THE KING'S COLLEGE.** Biology. Assistant Professor Biology, or higher tenure-track appointment, pending Board approval. Ph.D. required. Candidates should be able to teach either introductory botany or introductory zoology, and several of principles of ecology, field biology, plant ecology, plant morphology, ecophysiology, microbiology, biology of economic plants, animal population

ecology, and invertebrates, at the undergraduate level. Teaching load is moderate and research is required. Send letter of application, c.v., copies of transcripts, and three letters of reference to: Dr. S. Keith Ward, Vice President (Academic), The King's College, 10766-97 St., Edmonton, AB T5H 2M1. The King's College is a Christian liberal arts college affiliated with the University of Alberta. Degrees are offered B.A. and B.Sc. degrees. Position effective July 1, 1989 or July 1, 1990. In accordance with Canadian immigration regulations, this advertisement is directed to Canadian citizens and permanent residents.

## Department Biology

Postdoctoral fellow or research associate to work on sequence specific protein/DNA interactions in the DNA of the model organism *Escherichia coli* and/or the development of in vitro RNA polymerase II catalyzed transcription in this organism. The candidate must have a Ph.D. with major or specialization in biochemistry, molecular biology or genetics. At least two years post-doctoral experience working with tetrahymena is essential. Experience with protein purification as well as with molecular techniques such as footprinting, DNA sequence analysis and gene cloning is required. Appointment for two years with possible extension for a third year. Salary commensurate with NSERC guidelines. Application deadline is May 1989. Applications should be sent to: Dr. R. Pearlman, Department of Biology, York University, 4700 Keele Street, North York, Ontario, M3J 1P3. In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents.

## BOTANY

**THE UNIVERSITY OF BRITISH COLUMBIA.** Department of Botany. Research Associate/Technician. A position is available immediately to undertake basic research in plant nutrition. An appropriate background in agriculture or plant physiology is essential and experience in hydroponic systems is preferred. The work will involve integrated studies of the absorption and transport of the major nutrient ions by greenhouse crops (lettuce, tomato and cucumber) and the effects of environmental perturbations on plant processes. The minimum qualification required is an M.Sc. Applications should be received no later than May 31, 1989. This position is funded for three years but the appointment will be for one year initially, renewable by mutual agreement. Salary, according to qualifications and experience will be in the range from \$2,132 to \$2,200 per month. The University of British Columbia offers equal employment to qualified female and male applicants. In accordance with Canadian Immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. Please send a curriculum vitae and arrange to have three letters of reference to be sent to: Dr. A.D.M. Glass, Head, Department of Botany, The University of British Columbia, #3529-6270 University Boulevard, Vancouver, B.C. Canada, V6T 2B1.

## BUSINESS

**THE UNIVERSITY OF ALBERTA.** Faculty of Business. Applications are invited for full-time tenure-track faculty

positions from those with teaching and research interests in Accounting, Management Information Systems, Finance, and Marketing. Ph.D. or equivalent required or candidate should be at the completion stage of degree. Salary and rank depend on qualifications. Market supplements ensure that competitive offers are negotiable. Appointments normally effective July 1st. Positions subject to availability of funding. Send resume to: Dr. R. Smith, Dean, Faculty of Business, University of Alberta, Edmonton, Alberta, Canada, T6G 2R6. The University of Alberta is committed to the principle of equity in employment.

## BUSINESS ADMINISTRATION & COMMERCE

**MOUNT SAINT VINCENT UNIVERSITY.** Business Administration. Applications are invited for full-time positions beginning July 1, 1989, in the areas of management and accounting (subject to budgetary approval). The ability to teach effectively and willingness to engage in productive individual and/or group research is expected. A Ph.D. or DBA (pending approval) will be given in accordance with qualifications and experience. In accordance with Canadian employment and immigration regulations, preference will be given to Canadian citizens and permanent residents. Send curriculum vitae with transcripts and the names of three referees to: Dr. Susan Clark, Dean of Human and Professional Development, Mount Saint Vincent University, Halifax, N.S. B3M 2J5.

**UNIVERSITY COLLEGE OF CAPE BRETON.** Management and Administration. Subject to budgetary approval, applications are invited for a tenure track position commencing July 1, 1989.

Applicants should have a Ph.D. (completed or near completion) and relevant teaching or practical experience. Responsibilities include teaching in the Bachelor of Business Administration program and research. Preference will be given to those with expertise in two related areas. All applications, accompanied by transcripts, full curriculum vitae showing qualifications, previous experience and the names of at least three referees who have been asked to write on the candidate's behalf, should be sent to: Professor Harvey Johnstone, Chairman, Department of Management and Administration, University College of Cape Breton, P.O. Box 5300, Sydney, Nova Scotia, B1P 6L2. Deadline for applications is April 30, 1989.

**UNIVERSITY OF REGINA.** Faculty of Administration. Applications are invited from candidates with qualifications in the areas of Accounting and Industrial Relations. Rank of Assistant, Associate or Professor; rank based on qualifications and experience, preferably at the Assistant or Associate level. Ph.D. or DBA (completed or near completion) is expected, preferably with teaching and research experience. Duties include research and teaching at both graduate and undergraduate levels. Salary will commensurate with qualifications, teaching and practical experience. Appointment date opens when position is filled. Applications should be sent to: Dr. Ed Waynes, Associate Dean, Faculty of Administration, University of Regina, Regina, Saskatchewan S4S 0A2.

**UNIVERSITY OF MANTOBA.** Faculty of Management. Applications are invited in the areas of (i) accounting, (ii) finance, and

## Advertising and censure

CAUT will not carry advertisements from censored universities. CAUT refuses ads from such universities because the Council explicitly recommends that members not take positions at universities which have been censored.

## Publicité et censure

L'ACPU refuse les annonces des universités frappées de la censure parce que le Conseil recommande explicitement aux membres de ne pas accepter de poste dans l'une de ces universités.

## CAUT/Group Insurance

CAUT members are entitled to apply for these low-cost plans:

1. LIFE INSURANCE up to \$500,000.
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3. FAMILY LIFE INSURANCE for spouses and children of members.
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For complete details, brochures, applications, premium costs, etc. mail the coupon to:

Pour obtenir des détails complets, brochures, formes d'adhésion, tableaux des primes, etc. postez le coupon à:

# KANATA

CAUT Insurance Trust, P.O. Box 3528, Station C, Ottawa, Canada K1Y 4G1.  
Administrateur de l'Assurance de l'ACPU, C.P. 3528, succursale C, Ottawa, Canada K1Y 4G1.

Les membres de l'ACPU peuvent souscrire aux régimes suivants à prix modique:

1. ASSURANCE-VIE jusqu'à \$500,000.
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3. ASSURANCE-VIE POUR LA FAMILLE sur la vie du conjoint et des enfants des membres.
4. RÉGIME D'ASSURANCE EFFETS PROFESSIONNELS livres, ordinateurs, etc.

Please send me information outlining the CAUT Insurance Plans.

Veillez, s'il vous plaît, me faire parvenir les renseignements complets sur les régimes d'assurance de l'ACPU.

Name/Nom

Address/Adresse

City/Ville

Province

Code



**UNIVERSITY OF NEW BRUNSWICK.** The University of New Brunswick is committed to the principle of equity in employment but in accordance with Canadian immigration laws, only Canadian citizens, permanent residents, and persons selected to Canadian citizens and permanent residents.

**UNIVERSITY OF NEW BRUNSWICK.** The Division of Vocational Education. Applicants are invited to fill a full-time position in Adult Education, effective June 1, 1989. The position is a full-time position and is subject to budgetary approval. The successful candidate should possess (1) a baccalaureate degree in an appropriate area; (2) a minimum of five years' experience in the following areas: (a) methods of teaching adult learners; (b) program curriculum development; (c) program administration; and (d) administration in higher or continuing education; (3) evidence of research competence; and (4)



**FORESTRY**  
**LAKEHEAD UNIVERSITY.** A Chair in Forest Management and Policy has been established at the School of Forestry to undertake research that meets some key needs of the forestry community in Ontario. The research program is currently being developed with input from a wide range of interests and stakeholders in the Ontario forest sector. Topics under consideration include: sustainable community development based on



**APPROBATION TEACHING POSITIONS.** Applications, including curriculum vitae and names of three referees, should be sent to: Professor J.L. Sanders, Chairman, Department of History, University of New Brunswick, St. Catharines, Ontario, L2S 3A1. Applicants will be accepted until April 30, 1989. In accordance with Canadian Immigration requirements, this advertisement is directed to Canadian citizens and permanent residents. Brock University is an equal opportunity employer.

**UNIVERSITY OF NEW BRUNSWICK.** The Department of History of the University of New Brunswick is accepting applications for a probationary tenure-track position, at the level of Assistant Professor, in the field of Canadian History. The position is subject to budgetary approval. While the area of specialization within the Canadian field is open, the successful candidate will be expected to teach both at the undergraduate and graduate levels and to participate in the editing of the journal *Acadiensis*. The successful candidate will be expected to write and be an active publishing scholar. Applicants should send a C.V. and request for consideration to: Dr. Stephen E. Patteson, Chairman, Department of History, University of New Brunswick, P.O. Box 4040, Fredericton, N.B., E3B 5A3. Applications and letters should be received by May 1, 1989. In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents.

**UNIVERSITY OF NEW BRUNSWICK.** The Department of History, University of New Brunswick, is accepting applications for a probationary tenure-track position, at the level of Assistant Professor, in the fields of *Art, Medieval/Renaissance, and Reformation*. The position is subject to budgetary approval. The appointee must have completed Ph.D. and be expected to teach in both fields at the undergraduate level and in one at the graduate level. Applicants should send a C.V. and request for consideration to: Dr. Stephen E. Patteson, Chairman, Department of History, University of New Brunswick, P.O. Box 4040, Fredericton, N.B., E3B 5A3. Applications and letters should be received by May 1, 1989. In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents.

**BROCK UNIVERSITY.** Applicants are invited to apply for a tenure-track job in the United States history. Candidates should be prepared to teach courses in colonial history and nineteenth century American history or American foreign policy. Candidates should have a Ph.D. and relevant teaching experience. Stating salary requirements is optional. Send curriculum vitae and names of three referees, should be sent to: Professor J.L. Sanders, Department of History, University of New Brunswick, St. Catharines, Ontario, L2S 3A1. Applications will be accepted until April 30, 1989. In accordance with Canadian Immigration requirements, this advertisement is directed to Canadian citizens and permanent residents. Brock University is an equal opportunity employer.

**ITALIAN STUDIES**

**BROCK UNIVERSITY.** The Department of French, Italian and Spanish invites applications for a 10-month sabbatical appointment at the rank of Assistant Professor at the Lichner rank, commencing July 1, 1989. The M.A. or Ph.D. degree, native or near-native fluency in Italian and proven teaching experience in Italian and/or the Italian language at various levels are required. Send curriculum vitae, and arrange to have your curriculum vitae sent to Professor Ernesto Virgulti, Chair, Department of French, Italian and Spanish, Brock University, St. Catharines, Ontario, L2S 3A1. Closing date for the receipt of applications is May 30, 1989. In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents. Brock University is an equal opportunity employer.

**LATIN AMERICAN STUDIES**

**SIMON FRASER UNIVERSITY.** Faculty American Studies. A limited-term Faculty position in Latin American Studies at the rank of Assistant Professor for a one-year term starting September 1, 1989, with the possibility of renewal. The successful candidate will be expected to involve teaching and research in the Latin American Studies Program. The interdisciplinary course work and research in the social and cultural contemporary Latin American subjects. The Latin American Studies Program is an interdisciplinary program that includes and offers a Joint Major BA degree in LAS and a selected certificate (Archaeology, Communication, Geography, History, Political Science, Sociology, Anthropology,











one- or two-year appointment in the area of developmental psychology. The successful applicant will be expected to teach undergraduate courses in developmental and educational psychology as well as at least one additional course such as Introductory Psychology. A person with an active research program is preferred. This position is available July 1, 1989. Applications will be accepted until the position is filled. Applicants should send a curriculum vitae, and the names and addresses of three referees to: Dr. J. Hunsberger, Chair, Department of Psychology, Wilfrid Laurier University, Waterloo, Ontario, N2L 3G5. Candidates are informed that Wilfrid Laurier University has established a smoke-free environment. In accordance with Canadian Immigration requirements, this advertisement is directed to Canadian citizens and permanent residents of Canada.

**WILFRID LAURIER UNIVERSITY.** Department of Psychology. Limited Term Position in Methods and Statistics. Applications are invited for a one-year appointment in the area of research in statistics. The successful applicant would be expected to teach methods and statistics at both the basic and advanced undergraduate level, as well as to teach graduate course dealing with experimental design and the use of computer packages. A person with an active research program is preferred. This position is available July 1, 1989, and is open until filled. Applicants should send a curriculum vitae, and the names and addresses of three referees to: Dr. J. Hunsberger, Chair, Department of Psychology, Wilfrid Laurier University, Waterloo, Ontario, N2L 3G5. Candidates are informed that Wilfrid Laurier University has established a smoke-free environment. In accordance with Canadian Immigration requirements, this advertisement is directed to Canadian citizens and permanent residents of Canada.

**UNIVERSITY OF PRINCE EDWARD ISLAND.** Title of position: Applications are invited for the assistant professor level to a 3-year term position, convertible to tenure-stream. We are looking for a candidate with a strong background in research in psychology combined with teaching and research interests in the area of sex roles, gender differences, and the psychology of women. Qualifications: Ph.D. in psychology with experience in research. 3. Nature of duties: Teach a total of 8 undergraduate courses - include social psychology, developmental psychology, statistics, and possibly Introductory psychology. 4. Salary offered: Salary dependent on qualifications, experience, and rank. Person with complete address to whom inquiries should be sent: Send letter of application, curriculum vitae, and three letters of recommendation to: Dr. Jean, Ph.D., Chair, Department of Psychology, University of Prince Edward Island, 550 University Ave., Charlottetown, P.E.I. C1A 4P3. Closing date: July 1, 1989. 7. Closing date for receipt of applications: Closing date for receipt of application is May 30, 1989. In accordance with Canadian Immigration requirements, this advertisement is directed to Canadian citizens and permanent residents of Canada.

**UNIVERSITE D'OTTAWA Psychologie.** L'École de psychologie prévoit, sous réserve de disponibilité financière, avoir un poste de professeur adjoint en psychologie clinique de septembre à mai 1990. Le candidat(e) agencé(e) pourrait être considéré(e). Il est possible également que ce poste devienne un poste régulier. Une partie des fonctions mentionnées ci-dessous sera consacrée à la coordination de l'extension du programme doctoral de psychologie clinique au Nord-Est de l'Ontario. La priorité sera accordée aux candidatures de personnes ayant une expérience en psychologie clinique de l'enfant ou de l'adulte. Les qualifications minimales sont: le baccalauréat en psychologie et un très bon baccalauréat en recherche. Une bonne maîtrise du français et de l'anglais est essentielle. La connaissance de la région du Nord-Est de l'Ontario est un atout. Le salaire minimum de l'année en cours au niveau de professeur(e) adjoint(e) est de \$33,124, et celui de professeur(e) adjoint(e) de \$34,724. Les salaires sont en vigueur à la fin de l'année universitaire. Les candidatures doivent être reçues avant le 15 mai 1989. Adresser une lettre accompagnée d'un curriculum vitae, du nom et de l'adresse de trois personnes de référence à: Dr. Pierre Baron, Directeur, École de psychologie, Université d'Ottawa, Ottawa, Ontario, Canada, K1N 6N5. Concomitamment aux éléments de l'information ci-dessus, cette annonce s'adresse aux citoyens canadiens et aux immigrants récents.

**ALGOMA UNIVERSITY COLLEGE** seeks a one-year substitute teacher in Psychology. Applicants should be experienced, dedicated teachers, with expertise in a variety of areas, including several of the following: Experimental

Method; Learning; Systems and Theories; Emotion; Motivation; and Sensation. Qualified applicants should submit a curriculum vitae and names of three referees to: Dr. T. A. Alawa, Director, Department of Psychology, University College, 1500 Queen Street East, Suite 100, Sault Ste. Marie, Ontario, P6A 2G4. Algoma offers an undergraduate-oriented, smoke-free environment, a collegiality of life and competitive salary and benefits. This advertisement is directed primarily at Canadian citizens and permanent residents of Canada.

**ST. THOMAS UNIVERSITY.** The Department of Psychology, St. Thomas University, has a limited-term limited-term Professor (subject to approval) effective July 1, 1989. Candidates will be expected to supervise honours thesis, teach Introductory psychology and one or more of the following undergraduate courses: Statistics, Learning, Behaviour Modification, Development and Experimental Design. Applications from women and men with research interests in any area of academic psychology will be accepted. Preference will be given to Canadian citizens and landed immigrants. Applicants should send a curriculum vitae, and the names and addresses of three referees to: Dr. Thomas A. Fish, Chair, Department of Psychology, St. Thomas University, Fredericton, New Brunswick, E3B 5G3.

**UNIVERSITY OF ALBERTA.** The Department of Psychology, University of Alberta, invites applications for a tenurable appointment (Ph.D. required) in the area of cognitive psychology. Decisions will be made on the basis of demonstrated research competence (as indicated by publication record), interactions with colleagues, and teaching ability. Strong preference will be given to an individual whose research interests are in the area of visual cognition, with secondary interests in attention and/or language processing. In addition, a strong commitment will be given to those candidates whose interests are compatible with existing department research programs and research interests. Rank is at the Assistant Professor level. 1988-89 salary \$33,144 - \$47,280. Applications should include curriculum vitae, research record, recommendation, and reprints or recent publications and be sent to Dr. Peter Dixon, Chair, Cognitive Search Committee, Department of Psychology, University of Alberta, Edmonton, Alberta, Canada, T6C 2E9. Deadline for receipt of applications is September 1, 1989. In accordance with Canadian Immigration requirements, this advertisement is directed to Canadian citizens and permanent residents of Canada. The University of Alberta is committed to the principle of equity in employment.

**SCIENCE EDUCATION.** TRENT UNIVERSITY. Applications are invited for a tenure track position in Science Education at the assistant or associate professor level. Closing date: July 1, 1989. The appointment will be made in one of Trent's science departments. Candidates should possess a Ph.D. in Science Education and have teaching courses in the relevant department/program and science education at the undergraduate level and have a minimum of 3 years of teaching experience. Applications including a full curriculum vitae and the names of three referees who have been asked to write on the candidate's behalf should be addressed to Professor Peter Barrett, Associate Dean of Science, Trent University, Box 4800, Peterborough, Ontario K9J 6X9 by May 15, 1989. In accordance with Canadian Immigration regulations, this advertisement is directed to Canadian citizens and permanent residents. The University of Trent is committed to the principle of equity in employment.

**SERVICE SOCIAL.** UNIVERSITE LAVAL. Faculté des sciences sociales. Poste de Professeur(e) - École de Service Social. L'École de Service Social recherche un spécialiste dans le champ d'étude du service social auprès des individus et des familles. Le ou la titulaire aura à sa charge la responsabilité de l'enseignement de l'École aux trois cycles d'études. La majorité des ses tâches sera consacrée à l'enseignement et à la recherche dans ce champ de recherche. Le candidat(e) doit avoir une maîtrise ou un baccalauréat en service social ou l'équivalent ou bien doctorat dans une discipline connexe avec maîtrise en service social; Expérience et compétence reconnues en service social auprès des individus et des familles; Aptitude et intérêt pour le développement et la recherche en service social dans le domaine auprès des individus et des familles de même que pour la diffusion des connaissances; Expérience pertinente en enseignement au service social. L'expérience de l'enseignement universitaire sera un atout. Rémunération et avantages sociaux selon la convention collective en vigueur à l'Université Laval.

Date d'entrée en fonction: à partir du 1er juin 1989. Date de clôture du concours: faire parvenir un curriculum vitae au journal la vie des publications au plus tard le 30 avril 1989. Jacques L. Bouchard, École de service social, Faculté des sciences sociales, Université Laval, Québec G1K 7P4.

**SOCIAL WORK.** LAKEHEAD UNIVERSITY. The Department of Social Work is seeking a full-time, tenure-track position for the position of Field Co-ordinator. This will be a probationary (tenure-track) appointment to commence July 1, 1989. Candidates must have an MSW degree in social work with several years experience. Previous experience in field supervision of social work students an asset. Community and human relation skills essential. Rank and salary will be commensurate with qualifications and experience. Apply in writing by May 1, 1989 to: Curriculum vitae, and the names of three referees to: Dr. J.H.M. Whitham, Dean of Arts and Science, Lakehead University, Thunder Bay, Ontario, P7B 5E1. In accordance with Canadian Immigration regulations, this advertisement is directed to Canadian citizens and permanent residents of Canada.

**CARLETON UNIVERSITY.** Subject to budgetary approval, the School of Social Work, Carleton University, is making a one-year, tenure-track appointment at the Assistant Professor level for the coming academic year, with the possibility of additional years. The position is in the area of Social Work. The candidate will be expected to contribute mainly to the Direct Practice stream, but the ability to contribute also to the Policy and Administrative stream will be considered an asset. Experience in the development of policies and practices in Native Studies and race relations will also be seen as an asset. Candidates with a Ph.D. in other disciplines with related social work educational, research and practice experience will be considered. Applications or nominations, curriculum vitae and names of three referees should be sent to: Roland Locantore, Chair, Department of Social Work, Carleton University, Ottawa, Ontario, K1S 5B6, by May 1, 1989. Effective date of employment is July 1, 1989. In accordance with Canadian Immigration regulations, this advertisement is directed to Canadian citizens and permanent residents of Canada. The University of Carleton is committed to the principle of equity in employment.

**SOCIOLOGY.** THE KING'S COLLEGE. Sociology. Assistant Professor of Sociology or higher tenure track appointment. Ph.D. required. Candidates should be able to teach introductory sociology and undergraduate courses in at least two of social order, social change, social institutions, and social issues, and should demonstrate familiarity with theoretical groundings of the discipline. Teaching load is moderate and research is required. Send letter of application, cv, copies of transcripts, and letters of reference to: Dr. Keith Ward, Vice President (Academic), The King's College, 10786 - 97 St. Edmonton, AB T5H 2M1. The King's College is a Christian liberal arts college affiliated with the University of Alberta and offering B.A. and B.Sc. degrees. Position effective July 1, 1989 or July 1, 1990. In accordance with Canadian Immigration regulations, this advertisement is directed to Canadian citizens and permanent residents.

**SOIL SCIENCE.** UNIVERSITY OF SASKATCHEWAN. Soil Science. Applications are invited for a tenure track position at the Assistant Professor level. Requires a Ph.D. in Soil Science, or Agronomy with major research programs on pedogenic processes in relation to land resources, managed and natural ecosystems and environmental problems. Current salary range is \$30,711 to \$39,587 (under review). Send letters of application, names and addresses of three referees, academic curriculum vitae, and a letter to J.W.B. Stewart, Head, Department of Soil Science, University of Saskatchewan, Saskatoon, Saskatchewan, Canada, S7N 0W0. Tel: 306-966-8824. Fax: 306-966-6881 by April 30, 1989. Effective date of appointment July 1st 1989.

**SPANISH.** UNIVERSITY OF SASKATCHEWAN. Applications are invited for a tenure track position, commencing July 1, 1989, at the rank of Assistant Professor. Primary duties will involve teaching language and literature courses at the undergraduate level. A background in both Peninsular and Latin American literature is required. Comparative Literature component is highly desirable. A Ph.D. with a

teaching experience and a demonstrated commitment to research are essential. Candidates should submit their complete curriculum vitae and arrange for three letters of reference to be sent directly to: G.J. Whitham, Head, Department of French and Spanish, University of Saskatchewan, Saskatoon, S7N 0W0. Candidates will be interviewed if their qualifications are complete. In accordance with Canadian Immigration requirements, this advertisement is directed to Canadian citizens and permanent residents. Closing date for applications: April 30.

**THEOLOGY.** THE KING'S COLLEGE. Theology. Assistant Professor of Theology, or higher tenure track appointment. Ph.D. required. The successful candidate will be expected to introduce theology and undergraduate courses in at least two of biblical theology, systematic theology, and dogmatic theology, and preferably a course in comparative religion. Candidates should also be sensitive to the reforming theology and perspective that are strongly present in the King's College. Teaching load is moderate and research is required. Send letter of application, cv, copies of transcripts, and letters of reference to: Dr. Keith Ward, Vice President (Academic), The King's College, 10786 - 97 St. Edmonton, AB T5H 2M1. The King's College is a Christian liberal arts college affiliated with the University of Alberta and offering B.A. and B.Sc. degrees. Position effective July 1, 1989 or July 1, 1990. In accordance with Canadian Immigration regulations, this advertisement is directed to Canadian citizens and permanent residents.

**VETERINARY MEDICINE.** UNIVERSITY OF GUELPH. Department of Veterinary Microbiology and Immunology. A tenure-track position as assistant professor in veterinary immunology. Responsibilities include supervision of the graduate students in the Department of Veterinary Teaching Hospital, research, and teaching. Research opportunities exist in the fields of immunological and infectious diseases, with the possibility of collaboration and consultation in production and application of conventional and genetically engineered vaccines. The successful candidate should have a Ph.D. and preferably a DVM degree with experience in laboratory diagnosis of immunological and infectious diseases. A central interest in diagnostic immunology including both applications and development, is essential. In addition to teaching and grading assignments, this advertisement is directed to Canadian citizens and permanent residents. Please address inquiries, including evaluation of student applications; Faculty and/or Departmental committee work. Successful candidates will also be expected to devote time to research and/or other supporting educational activities. Letters of application should include a C.V., statement of teaching philosophy, and a list of references. Send application and/or other supporting documentation of current artistic work in at least three of the areas specified above, as well as names and addresses and phone numbers of three referees. Complete applications should be directed to: Ted Baker, Chair, Department of Visual Arts, University of Guelph, Guelph, Ontario, N1H 6W9. Applications should be sent to the Department of Visual Arts, University of Guelph, Guelph, Ontario, N1H 6W9. Applications should be sent to the Department of Visual Arts, University of Guelph, Guelph, Ontario, N1H 6W9. Applications should be sent to the Department of Visual Arts, University of Guelph, Guelph, Ontario, N1H 6W9.

**UNIVERSITE DE MONTREAL.** Le Département d'anatomie et physiologie animales de la Faculté de médecine vétérinaire de l'Université de Montréal est à la recherche d'un professeur(e) temps plein en physiologie animale. Le candidat(e) devra détenir une maîtrise ou un baccalauréat en médecine vétérinaire ou un Ph.D. ou l'équivalent. La candidate(s) choisie(e) devra assumer l'enseignement d'une partie de la physiologie vétérinaire au premier cycle et devra également encadrer des étudiants aux cycles supérieurs dans les domaines de la physiologie de la reproduction. Une préférence sera accordée aux candidats(e) possédant une formation en endocrinologie et en physiologie des membranes cellulaires. Les candidats(e) doivent détenir des qualifications et de l'expérience et seront évalués selon les normes définies par la convention collective. Priorité sera donnée aux candidats(e) possédant des révisions permanentes à des immigrants récents. Le concours se terminera lorsqu'une candidate(s) adéquate aura été choisie(e). Les candidats(e) doivent également soumettre une lettre de motivation et une lettre de recommandation. Le dossier doit être soumis par écrit, avec copie du curriculum vitae indiquant le nom et l'adresse de trois personnes de référence, à: Dr. André Blouin, directeur, Département de physiologie animale, Faculté de médecine vétérinaire, Université de Montréal, C.P. 5000, Saint-Hyacinthe, Québec, J2S 7G6.

**VIROLOGY.** UNIVERSITY OF ALBERTA/PROVINCIAL LABORATORY OF PUBLIC HEALTH FOR NORTHWEST ALBERTA. Clinical Virologist. A position is available for a medically-qualified clinical virologist with advanced training (preferably to the doctorate level) in the field of diagnostic laboratory methods. The applicant will assist in the overall administration of one of the major diagnostic and reference microbiology laboratories in the province

and will be specifically called upon to act as a medical consultant in areas pertaining to clinical virology. Additional duties will include: supervising residents, medical students and medical laboratory science students plus daily interaction with physicians and staff of several major hospitals and health units. Facilities are available for an active research programme, and the candidate will be expected to be active in that area and to obtain outside research funding. The starting date and salary are negotiable. Deadline: April 30, 1989. Please send a curriculum vitae and names of three referees to: Dr. D.L. Tyrill, Acting Director, Provincial Laboratory of Public Health for Northern Alberta, 181-17 W.C. Mackenzie Health Sciences Centre, University of Alberta, Edmonton, Alberta, Canada T6G 2A2. In accordance with Canadian Immigration requirements, this advertisement is directed to Canadian citizens and permanent residents of Canada. The University of Alberta is committed to the principle of equity in employment.

**VISUAL ARTS.** YORK UNIVERSITY. Faculty of Fine Arts, Open Admission Visual Arts. Applications are invited for four full-time sessional (9 month) contractually limited appointments at the Assistant Professor level in the areas of: 1. Visual Arts in the undergraduate programme, effective September 1, 1989 to May 31, 1990. The salary for the 9 month period will be \$28,850 plus a 10% annual salary increase (\$3,173) plus benefits. Three appointments will be made to teach in one or more of the following areas: Drawing, Sculpture, Photography and Photography introductory studio for non-majors. However, preference may be made in one of these appointments for a person with a background in studio work. Applicants must be mature working artists with a strong exhibition record. The ability to communicate effectively in English is essential. The successful candidate will be a graduate degree in Visual Arts or equivalent as well as post-secondary teaching experience. The successful candidate will teach at the intermediate and advanced levels in the area of Design. Applicants must be active in the design profession and/or design education and also demonstrate effectiveness in English is essential. Preferred is a graduate degree in Visual Arts in Design or equivalent as well as post-secondary teaching experience. Responsibilities of each appointment will include the preparation and presentation of course material in consultation with the area concerned, and grading assignments in accordance with Departmental guidelines; office hours for individual student contact; area planning, student advising and evaluation of student applications; Faculty and/or Departmental committee work. Successful candidates will also be expected to devote time to research and/or other supporting educational activities. Letters of application should include a C.V., statement of teaching philosophy, and a list of references. Send application and/or other supporting documentation of current artistic work in at least three of the areas specified above, as well as names and addresses and phone numbers of three referees. Complete applications should be directed to: Ted Baker, Chair, Department of Visual Arts, University of Guelph, Guelph, Ontario, N1H 6W9. Applications should be sent to the Department of Visual Arts, University of Guelph, Guelph, Ontario, N1H 6W9. Applications should be sent to the Department of Visual Arts, University of Guelph, Guelph, Ontario, N1H 6W9.

**YORK UNIVERSITY.** Faculty of Fine Arts, Open Admission Visual Arts. Applications are invited for a one-year full-time (12 month) contractually limited appointment in Art History, effective September 1, 1989 to August 31, 1990, with an option to renew for up to two more years. The salary and rank will be commensurate with qualifications and experience. The successful candidate will be expected to teach at the undergraduate and graduate level and may include a combination of three of the following: an introductory course in Art History, a survey or contemporary art course, a survey course directly related to Canadian and American art, and a course in the history of art. The responsibilities will include the preparation and presentation of course material in consultation with the area concerned, and grading assignments in accordance with Departmental guidelines; office hours for individual student contact; area planning, student advising and evaluation of student applications; Faculty and/or Departmental committee work. Successful candidates will also be expected to devote time to research and/or other supporting educational activities. Letters of application should include a C.V., statement of teaching philosophy, and a list of references. Send application and/or other supporting documentation of current artistic work in at least three of the areas specified above, as well as names and addresses and phone numbers of three referees. Complete applications should be directed to: Ted Baker, Chair, Department of Visual Arts, University of Guelph, Guelph, Ontario, N1H 6W9. Applications should be sent to the Department of Visual Arts, University of Guelph, Guelph, Ontario, N1H 6W9. Applications should be sent to the Department of Visual Arts, University of Guelph, Guelph, Ontario, N1H 6W9.

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professional activity. Apply with letter of interest, C.V., statement of teaching philosophy and the names, addresses and phone numbers of three referees to: Ted Baker, Chair, Department of Visual Arts, Faculty of Fine Arts, York University, North York, Ontario M3J 1P3. Deadline for receipt of applications is April 30, 1989. Position is subject to budgetary approval. In accordance with Canadian Immigration requirements, this advertisement is directed to Canadian citizens and permanent residents. York University is implementing a policy of employment equity. Qualified women and men are encouraged to apply.

**ZOOLOGY.** BISHOP'S UNIVERSITY. Vertebrate Zoology. Bishop's University wishes to make a three-year temporary appointment at the assistant professor level in Vertebrate Zoology. The successful candidate (or as soon as possible thereafter). There is a possibility that the appointment will be converted to a regular tenure stream one, two, or three years later. The successful candidate will be responsible for teaching vertebrate zoology and/or comparative chordate anatomy, embryology, histology, plus other vertebrate courses in the Department of Zoology. Such courses might include: immunology, mammalogy, ornithology, herpetology, ichthyology, wildlife biology, etc. The successful candidate will also be responsible for supervising the graduate students at \$32,712. Please send your curriculum vitae (including names, addresses and phone numbers of three referees) to: Dr. J. Hunsberger, Chair, Department of Zoology, Bishop's University, Lennoxville, QC, J1M 1Z7, Tel: 819-822-3600.

**FACULTY EXCHANGE.** FACULTY EXCHANGE CENTRE, non-profit organization established in 1973, helps (1) college and university professors to exchange teaching positions, and (2) all educators (elementary, secondary, and college) to exchange teaching positions with colleagues on this continent and abroad. FEC serves individual faculty as well as member colleges. For more details send request for information to: Faculty Exchange Centre, 717 Avenue, Lancaster, Pa., USA, 17603; 717-393-1130.

**ACCOMMODATION.** HOUSE FOR RENT, furnished in Woodstock, Ontario, 40 minute drive to London, Kitchener-Waterloo, Guelph, Hamilton, 2, 3 or 4 bedroom, a/c, central heating, available to rent from 1989 to June 30, 1990; White Mercer, Dept. Physiology, University of Western Ontario, London, Canada, N6A 3K1; (519)851-3478.

**QUEBEC CITY.** town house (7 rooms) with furniture and appliances, sunny, heated, parking, available to rent from 1st 1989 to June 30th 1990. For details write to: Dr. P. Cagnon, 10318 Barfield Ave., Québec, Q1A 2P1; (418) 658-6231.

**OXFORD, ENGLAND:** Walk to colleges, furnished North Oxford House, centrally located, 15 minutes to 25 colleges, 2 bedrooms; available April 1 - May 4, 1989, 300 pounds, after June 1st 9 available per month at \$150 pounds per month. Contact: 174 Dorset Avenue, K1M 2A6, tel: 613 7451358, 7465718 or 36 Kingston Rd, Oxford OX2 6RH, tel 0865 7465718.

**OTTAWA:** opposite Governor General's residence, furnished luxury townhouse, 2 bedrooms, fireplace, deck, 2 1/2 baths June 9 - onwards \$1500 per month includes heat, electricity, (613) 745 1388 or 746-8718.

**MONTREAL:** 3 bedroom furnished house - centrally located - near Metro: 1 June 1989 - 31 May 1990; 514-651-8621 (weekends & evenings); 614-2422 (days).

**SOUTHERN FRANCE, SABBATICAL REHABILS,** within 4km from Aix-en-Provence. One small but delightful 3 houses FF\$500. Two 4/5 or 5 bedrooms, 2 bathrooms, 2nd floor, pleasant accommodation, part of former farmhouse, FF\$250. Other possibilities.

All expenses included. For more information contact: Dr. J. Hunsberger, Chair, Department of Visual Arts, University of Guelph, Guelph, Ontario, N1H 6W9.

**PROVINCIAL LANDSCAPE.** Fee of 1/2 month rent includes help in getting settled and registering children in school. Contact: Dr. J. Hunsberger, Chair, Department of Visual Arts, University of Guelph, Guelph, Ontario, N1H 6W9. Tel: 416-293-5310.

**YORKVILLE, large, modern home for rent** includes 3 bedrooms, 2 bathrooms, 2nd floor, family room etc. 1.5 km from University. Near schools and shopping. On quiet street. Available July 1, 1989 - June 30, 1990. Tel: 416-593-1000.

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in pleasant area of North London far from  
from September, 1989 to summer, 1990.  
Fully furnished with modern kitchen, gas  
central heating and appliances including  
washing machine. 25 minutes from  
University of London by public transit.  
Suitable for academic on sabbatical leave.  
For further information, contact John  
Calkins, 432-920 Dwyer Road, Ottawa  
K2C 0G8; (613) 723-2820.

UNIVERSITY OF WESTERN ONTARIO  
Department of Rental Housing  
Professor going on sabbatical would like to

rent fully furnished 4-bedroom house  
located walking distance from University  
and major hospitals. For details contact:  
Dr. Barry Tapperman, Department of  
Physiology, University of Western Ontario,  
London, Ontario N6A 5C1; tel. (519) 661-  
3462 (office) (519) 434-3837 (home) or  
(519) 661-3827 (fax).

VISITING TORONTO? Bed and  
Breakfast in our restored home minutes to  
the University of Toronto and Downtown  
Toronto. From \$100.00. Leigh Heritage  
Home Ltd. (416) 595-4000.

## Noticeboard

CONFERENCE: SEXUALITY AND  
VALUES, June 19 - 21, 1989. The  
University of Guelph's 11th annual  
conference on human sexuality and  
issues in human sexuality, teaching  
approaches in sex education, and  
counseling methods for sexual problems.  
The keynote speaker is Alan Watts, St.  
Gordon. For further information, write  
Continuing Education Division, University  
of Guelph, Guelph, Ontario N1G 2W1, or  
telephone (519) 824-4100, ext. 3056.  
THE UNIVERSITY OF LETHBRIDGE:  
FIRST CALL FOR PAPERS: Studies in  
Technology-Mediated Communication, will  
particularly include papers that are  
international, interdisciplinary, theoretical,  
empirical, macro, micro. For information  
on subject matter possibilities and  
submission requirements please contact  
Urs E. Gattiker, Technology Assessment  
Research Unit, School of Management,  
The University of Lethbridge, Lethbridge,  
Alberta, Canada, T1K 3M4; FAX: (403)  
329-0022; E-MAIL: GATTIKER@VP@  
UNLETHBRIDGE.CA

CALL FOR ARTICLES: "THE OLD  
RIGHT, THE NEW RIGHT AND THE  
STATE". Studies in History and Politics,  
volume VII, will be open to articles on the  
development of modern (right) wing  
ideologies and on the impact of those  
ideologies on the state. All articles will  
be refereed. Articles of not more than 7500  
words (including footnotes) may be  
submitted in duplicate and on disc.  
Manuscripts should conform to the MLA  
style sheet and should reach the editors  
no later than October 1, 1989. All  
contributions should be addressed to:  
The Editors, Studies in History and  
Politics, Box 180, University of Lethbridge,  
Quebec, J1M 1Z7.

THE 11TH ANNUAL CONFERENCE OF  
THE CANADIAN APPLIED MATHE-  
MATICS SOCIETY, 23-25 June, 1990, in  
Canada, May 29 - June 1, 1990, call for  
papers available. Contact: Dr. Matur  
Rahman - for Technical info: Tel: 902-  
420-724; May Medals and Registration  
info: Tel: 902-420-7731; 1-800-365-7164;  
Technical University of Nova Scotia, P.O.  
Box 1000, Halifax, Nova Scotia, B3J 2X4  
Canada.

WILKIE COLLINS CENTENNIAL  
CONFERENCE, September 29 - October  
1, 1989, University of Victoria, British  
Columbia. Speakers include Michael Booth,  
Fred Kaplan, Christopher Kent, Sue  
Lonnoff, Catherine Peters, John  
Sutherland. Address: Nelson C. Smith  
Conference Secretary, Department of  
English, University of Victoria, P.O. Box  
1700, Victoria, British Columbia, Canada  
V8W 2Y2.

THE SECOND INTERDISCIPLINARY  
CONFERENCE ON NATURAL RE-  
SOURCE MODELLING AND ANALYSIS,  
May 12-14, 1989, Florida State  
University, Tallahassee, Florida. The  
conference will focus on recent progress  
and current issues - biological, economic  
and social technical. The conference will  
modeling and analysis of conserving  
fisheries, forests, soil, water, wildlife and  
other natural resources; and it will foster  
collaboration across traditional discipline  
boundaries among biologists, earth  
scientists, economists, engineers,  
mathematicians and resource managers.  
Deadline for contributions: May 15. Those  
who wish to present a paper (20 minutes)  
at the meeting should submit an abstract  
before August 31, 1989. For more information  
regarding the conference, please contact:  
Michael Mesterlo-Gibson, Department of  
Mathematics, FSU, Tallahassee, Florida  
32306-3207; tel: (904) 644-2580/2202;  
Electronic Mail: MKMEM@FSU.BINET.

CALL FOR PAPERS: THE 11TH  
ANNUAL MEETING OF THE CANADIAN  
ASSOCIATION OF SPORTS SCIENCES  
(CASS/ACSS), November 25-29, 1989, at  
Le Grand Hotel, Montreal, Quebec. The  
meeting includes 12 symposia, as well as free  
communications and poster presentations  
on several topics dealing with the sport  
sciences, its place in society, and the  
submission of abstracts is June 1st, 1989.  
For more information: Mr. Phillip Gardiner,

Department of Physical Education,  
University of Montreal, Box 6124, Station  
A, Montreal, Quebec, Canada H3J 3J7;  
tel: (514) 343-6151, FAX (514) 343-  
2180.

INVITATION A SOUMETTRE DES  
RESUMES: LA 22IEME REUNION  
ANNUELLE DE L'ASSOCIATION  
CANADIENNE DES SCIENCES DU  
SPORT (CASS/ACSS), qui aura lieu du 25  
au 29 novembre 1989 au Grand Hotel de  
Montreal, Montreal, Quebec. Les symposia  
et ateliers de travail ont pour but, ainsi  
que des communications libres et  
affiliées portant sur plusieurs aspects  
du domaine des sciences du sport sont  
placées. La date limite pour soumettre  
des résumés est le 1er juin 1989. Pour  
plus de renseignements, veuillez contacter  
M. Phillip Gardiner, Département  
d'éducation physique, Université de  
Montréal, C.P. 6128, succursale A,  
Montréal, Québec, Canada H3J 3J7.  
Téléphone: (514) 343-7450, FAX (514)  
343-2181.

CALL FOR PAPERS: The Canadian  
Journal of Educational Communication  
Technology and the International Council  
for Canadian Studies (ICCS). The  
Learning Technologies to be published in  
a special issue in the Fall of 1989. Topics  
within this area may include, but are not  
limited to: instructional design, learning  
systems; hyper-media (e.g. HyperCard);  
expert advisory systems; telecommunica-  
tions; computer conferencing and  
smart systems. Papers may be reviews of  
literature, descriptions of approaches or  
procedures, descriptions of new  
technologies, theoretical discussions or  
reports of research. For details on the  
preparation and submission of manuscripts,  
please refer to the call for papers on the  
inside back cover of any issue of  
CJEC. Except in unusual cases,  
manuscript length should not exceed 20  
pages. All manuscripts received by the  
editor will be reviewed by a panel of  
judges. The deadline for submissions is  
July 15, 1989. Please address all  
communications to: Dr. Richard A. Schrier,  
CJEC Guest Editor, College of  
Education, University of Saskatchewan,  
Saskatoon, Saskatchewan S7N 0W0; Tel: 306-  
974-4100; Fax: 306-974-4101.

PEOPLE, POWER, PARTICIPATION: A  
conference exploring adult learning,  
social movements and skills for active  
citizenship, May 28 - 31, 1989, The  
University of British Columbia. This  
second annual national adult education  
conference is sponsored by the Canadian  
Adult Education Association (CAEA), the  
Pacific Association for Continuing  
Education (PACE), UBC Centre for  
Continuing Education (CCE). Copies of  
the conference brochure are available  
from CAEA or from Jennifer Crawford,  
the Conference Coordinator, UBC Centre  
for Continuing Education, 5997 Louisa  
Avenue, Vancouver, B.C. V6T 2A4; tel: (604) 222-  
5218.

LEARNING DISABILITIES ASSO-  
CIATION OF CANADA announces its  
19th Annual Conference, "The Way  
The Way", hosted by Learning Disabilities  
Association of Newfoundland, The Hotel  
Newfoundland, St. John's, Newfoundland,  
May 19-21, 1989. Lighting The Way  
is a multi-disciplinary conference on  
learning disabilities for educators, parents,  
physicians, social workers and others  
interested in the field. 5 keynote sessions,  
24 workshops, speakers from every  
province, 8 speakers from the U.S., topics  
include: practical approaches for  
teachers, computers, social skills,  
assessment and remediation, special  
education. For more information contact:  
Deborah for contributors, 1000  
Colville St., St. John's, Nfld, A1E 3J8;  
Tel: (709) 561-01 or (709) 579-7273.

THE ASSOCIATION OF CANADIAN  
FACULTIES OF DENTISTRY /  
L'ASSOCIATION DES FACULTES  
DENTAIRE DU CANADA with has to  
announce the 1989 Annual Conference  
annual conference on dental education &  
research will be held June 10 - 16, 1989 at  
the Sheraton Armadillo Hotel (formerly  
1810 Alta Vista Drive, Ottawa, Ontario,  
K1G 3Y6; tel: (613) 738-7732; or Dr.  
Garald Z. Wright, Local Arrangements

Chairman, Faculty of Dentistry, Dental  
Sciences Building, University of Western  
Ontario, London, Ontario, N6A 5C1; tel:  
(519) 679-2111 (ext. 6114).

NATIONAL WORKSHOP ON EDU-  
CATION AND ERGONOMICS: The  
Associate Committee on Ergonomics of  
the National Research Council and the  
Human Factors Association of Canada are  
sponsoring a one-day workshop on June  
1989 at the University of Ottawa.  
Participants will discuss actual and  
proposed programs in ergonomics offered  
by universities and community colleges in  
relation to the needs of the users  
(corporations, government agencies, trade  
unions and individual ergonomists).  
The Workshop offers interested persons an  
opportunity to contribute to the  
development of a rapidly expanding field.  
For more information contact Mike  
Borczki, National Research Council,  
Ottawa, K1A 0R6.

ATELIER NATIONAL SUR L'EDU-  
CATION ET L'ERGONOMIE: Le Comité  
associé de l'ergonomie du Conseil  
national de recherche et l'Association  
canadienne d'ergonomie coparraineront  
un atelier d'un jour le 9 juin 1989 à  
l'Université d'Ottawa. Les participants  
discuteront les programmes en ergonomie  
offerts par les universités et les collèges  
communautaires, en rapport avec les  
besoins des utilisateurs (les sociétés, les  
agences gouvernementales, les syndicats et  
les ergonomes professionnels). L'atelier  
donnera aux personnes intéressées  
l'occasion de contribuer à un domaine d'où  
le développement est rapide. L'atelier offre  
plus amples informations veuillez vous  
adresser à Mike Borczki, Conseil national  
de recherches, Ottawa, K1A 0R6.

INTERNATIONAL CONFERENCE OF  
CANADIAN STUDIES, June 3, 4, 5,  
1989, in St. John's, Newfoundland. The  
Association for Canadian Studies and the  
International Council for Canadian Studies  
(ICCS). The theme will be dealt with in its various  
aspects (intellectual, cultural, social,  
economic and technological).  
The International Council for Canadian Studies  
and the Association for Canadian Studies,  
256 King Edward Avenue, #300, Ottawa,  
Ontario, Canada K1N 7M1; tel: (613) 232-  
2417.

CONGRES INTERNATIONAL BI-  
ANNUEL D'ETUDES CANADIENNES,  
June 3, 4, 5, 1989, in St. John's, New-  
foundland. The Association des  
études canadiennes (AEC) et le  
Conseil international d'études cana-  
diennes (CIEC). Le thème général du  
congrès sera traité des aspects intellectuels,  
culturels, sociaux, économiques,  
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